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THE SOCIAL AND EMOTIONAL CHARACTERISTICS OF POOR READERS WITH NORMAL INTELLIGENCE

by

© MARLISS PARSONS

A THESIS

SUBMITTED TO THE FACULTY OF GRADUATE STUDIES AND RESEARCH

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FACULTY OF GRADUATE STUDIES AND RESEARCH

The undersigned certify that they have read, and recommend to the Faculty of Graduate Studies and Research, for acceptance, a thesis entitled "The Social and Emotional Characteristics fo Poor Readers with Normal Intelligence," submitted by Marliss Parsons in partial fulfulment of the requirements for the degree of Master of Education.

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and my husband, for his suggestions, patience, criticisms, rantings, and ravings.

Abstract

The purpose of this study was to investigate the pattern of social and emotio l adjustment of a group of retarded readers of normal intelligence in a special setting.

The sample consisted of 138 students at W.P.Wagner High School. A battery of test including the Diagnostic Examination of Silent Reading Ability, The Junior-Senior High-School Personality Questionaire, The Survey of Interpersonal Values, The Teacher Rating Scale and a Sociometric Measure, were administered.

Comparisons were made between the scores of the total sample and the norm on the norm based tests, the HSPQ and the Survey of Interpersonal Values. The sample was then divided into poor and better readers on the basis of scores on the Diagnostic Examination of Silent Reading Abilities. Comparisons were made between the groups on the basis of personality traits, interpersonal values, peer status, and teacher rating of social and emotional adjustment. The group was then divided into males and females. Further comparisons were made on the basis of personality traits, interpersonal values, peer status, and teacher rating of adjustment.

The results indicated that social-emotional differences did not exist between this group and the norm. Significant differences did exist, however, between the poor and better readers, but not to the extent described in the research literature. Significant social-emotional differences also existed between the male and female groups, however some of the differences proved to be contradictory.

Generally, the social-emotional health of the poor readers in the sample was better than expected in view of the literature. This was attributed to the philosophy of reduced stress on academic failure and the addition of success experiences through the vocational training program offered by the special school.

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CHAPTER 1

Introduction

The capacity to learn from experience, the ability to use symbols and the development of a spoken and written language make it possible for man to deal more effectively with his environment, to communicate his experiences to others, and to pass on what he has learned to the next generation. In the biological hierarchy man is the only species with a history which can be transmitted to his kind symbollically, at a distance in space and time.

This ability for symbollic communication has become most important, and its acquisition is looked upon as a prerequisite for growth and development in most areas of human endeavour.

What, then, is thought of those individuals who find difficulty in learning to use various aspects of this symbollic communication? "Lacking", "infrahuman", or "backward" are characteristics implied by a culture intent upon achievement and performance. Children with reading problems will often find themselves being viewed in derrogatory terms such as these. Parents can account for the difficulty only on the basis of mental defect, obstinacy, or laziness, and they often resort to reproaches, nagging, and even punishment to bring about improvement in the child's reading skills. They are certain that all it would take for him to achieve is a bit of determined effort and possibly extra work. The teacher, with thirty pupils, may have recognized that the backward reader is not unintelligent in his speech and actions,

but she is only able to put him in her slowest group and do what she can to help him master the challenging task of learning to read. She too may consider the child negativistic and not willing to try. Peers, also, will note that the poor reader is different from others in the class. They depend considerably upon comparison between one another to develop self-image and mocking and teasing is often their reaction to someone they view as different from the group. It is the reactions of these significant others--the parents, teachers, and peers--that will direct the growth of self-attitudes and the subsequent development of personality traits, interpersonal values, and behavioral attributes of the poor reader.

Parents play the major role in the primary emotional growth patterns of their children. In fact, in early childhood the parents often offer the sole involvement of the child in social interactions. This lends considerable import to the parents' reaction to their child's reading problem. Several of the reading cases of Hincks (1926) showed aggressiveness and anxiety because their parents were distressed by their backwardness. In two-thirds of Young's 41 cases (1938), unnecessary pressure on the part of parents and teachers had contributed to the appearance of emotional disturbance in the children. Preston (1939) interviewed the parents of 100 children of normal and above normal intelligence, aged 7 to 17 years, who had failed to learn to read normally. She found that 66% of the mothers and 28% of the fathers were worried, anxious or upset by their children's reading failure. Three-quarters of the parents of poor readers taunted their children with the

failure, and made cutting comparisons with other children who were more successful. Fifty-two percent of the parents thought it was entirely the fault of the child that he could not read. One-third of the children were punished by deprivation of privileges and one-third by physical punishment. Johnson (1955) found that 62% of a group of 34 cases, which were referred to a reading clinic, were hampered in their remedial treatment by the parent's attitudes. In 38% of these cases there was too much pressure on the children's achievement.

Attitudinal changes in parents towards psychological health of the child have certainly taken place since the early studies, but Seigler and Gynther (1960) found that parents of poor readers still tended to use derrogatory descriptive terms about their children and to devaluate the poor readers' ability more often than parents of good readers.

Elkind (1971) suggested that the teacher-child interaction often perpetuates expectancies, wishes and disciplines originating in the home. Both hold similar values for achievement. However, when the child enters the classroom the teacher does become the decisive element. Her personal approach creates the climate. She possesses tremendous power to make a child's life miserable or joyous. She can be a tool of torture or an instrument of inspiration (Ginott, 1973). It is the teacher's attitude toward a child which will most often make the difference, a negative attitude toward a child hurting more than any punishment he may receive (Cangemi and Khan, 1973). Rosenthal and Jacobson (1968) found a significant improvement in the academic performance of children

who were described to teachers as those pupils who would be expected to bloom academically. The researchers attributed this improvement to a change in teacher attitude.

Teachers of children with reading problems face a very difficult task which may be compounded by subleties built into their teaching role. They may unconsciously believe their own security and advancement depends upon how well their students perform (Pacher, 1968). In addition, pointing out errors and mistakes becomes far too important in the dayly routine (Aspy, 1971). Holbrook (1964) stated that teachers have difficulty accepting children with reading problems because, being professionally concerned with improvement of mind and intellectual powers they often become frustrated and unhappy when they are brought to deal with children who have difficulties making the appropriate efforts to use their intellect. Good and Brophy (1972) rated differential teacher behavior toward different students in relation to the attitudes the teachers held toward those third grade students. Achievement status was related to all four areas of attitude being assessed, with attachment the primary attitude expressed toward high achieving students, indifference the major reaction to pupils in the middle range of achievement, and concern the main emotion felt for low achievers if they were female, while males were treated with rejection.

The child's interactions and relationships with peers is the third major area providing him with opportunities for clarifying his feelings about himself and others. As children seek experiences outside the home, the peer group becomes an important source

of emotional support (Perkins, 1969). In fact, Wagner (1971) wrote that with more frequent contact plus increasing absence of parents, the peer group has become as important a socializing agent as the home. A number of studies have looked into the relationship between peer acceptance and school performance. The Champaign Study (1961) of intellectually gifted children in grades two through five revealed that those achieving normally had a higher degree of perceived peer acceptance as expressed on the Perceived Peer Relationships Scale than the low achiever. Teigland, Winkler, Munger, and Kranzler (1966) found that achieving fourth grade boys were chosen more often on Gronlund's Sociometric Test as being boys their peers would prefer to sit with, work with, and play with. In a similar study of elementary school pupils, Williams (1958) discovered that four out of five children high in social acceptance were achieving within or beyond IQ based expectancy in reading, while approximately three out of five who were low in total acceptance were achieving below expectancy in reading. In studies by Granzow (1954) and Richards (1962) teachers rated their elementary school achievers as better accepted than underachievers by their peers.

Studies of high school students produced similar results to those found at the elementary level. Hines (1964) found that normally achieving high school seniors scored higher on the sociability scale of the Gordon Personal Profile, than did the underachievers. Gough (1953) in a study involving high school seniors, concluded from a survey of 64 discriminating items that the more successful students tended to be characterized by acceptance of others, denial of ill-will and animosity, and absence of interpersonal friction.

The fact drawn from these findings, that the child's success or failure in learning to read is fraught with serious social consequences, makes the task of beginning reading "one of the most critical and difficult tests of a lifetime" (Gates, 1957). If the child learns to read well there is no worry. If he does poorly or fails, the respect of his parents, teachers and peers and his own self-esteem are threatened. When the test of learning to read becomes a test of a child's status as a total person, it becomes an ominous source of anxiety which increases the difficulty of learning and subtly induces many children to seek some sort of "escape" from the test. Unfortunately for the youngster there is no satisfactory form of escape from learning to read, as there is from most of his other activities. If a child does not perform well in sports or music he can turn to other activities and compensate. However, there is in school and elsewhere today, no satisfactory substitute for reading.

Seriousness in the learning to read task also results from the fact that for many it is a very complex and formidable task presented at a time when the children, inexperienced in learning in a new and often confusing group situation, must make many new adjustments. The difficulty and cruciality of learning to read combine to make it a cauldron of anxiety and trouble, perplexing to child, parent, and teacher.

Unfortunately, this problem applies to quite a proportion of the school population. Despite the quantity of experimental data, the wealth of ingenious teaching devices, the range of interesting children's reading materials, and the great amount of school time

devoted to teaching reading, a surprisingly large number of pupils still experience difficulty in acquiring satisfactory reading skills.

Kvaraceus (1971) reported that one in seven children from elementary schools of average size is sufficiently below grade level in reading to require special attention to keep up with his classmates; in the case of large, city schools, the ratio is one in four. More specifically, one in four eleven-year-olds reads at or below the level of an average nine-year-old.

Other figures and estimates indicate that reading disability constitutes a serious problem in the school. According to Betts (1957) various authorities estimate that 8% to 15% of the school population have varying degrees of reading disability. The percentage cited by Durrell (1955) is 15% and by Monroe (1938) is 12% to 15%. The picture presented by Witty (1949) and Lazar (1952) is similar with about 16% to 22% of the eighth grade pupils more than two years retarded in reading. More recent studies reveal similar trends. Austin, Bush, and Huebner (1961) found approximately 16% of children in grades three to nine were in need of special help in reading. It appears, then, that a sizable proportion of the population do have difficulties in learning to read and that all of these are vulnerable to the emotional stresses placed on them by the reactions of others to their failure.

Furthermore, Gates (1947) reported findings that indicate that failure in reading is the most frequent cause of school failure. According to the study, 99%of the pupils failing of promotion were marked as "failures in reading"; in grade two, the percentage was approximately 90%; in grade three approximately 70%; grade

four, 56%; grade five, 40%; grade six, 33%; and grade seven and eight, 25%. It may be assumed that many of these pupils had difficulty in other subjects primarily because of deficiencies in reading skills. Lee (1933) showed that pupils in fourth and higher grades, whose reading attainment falls below the reading norms for the fourth grade were almost always markedly handicapped in their work in other subjects.

For these children the experience of continual failure over the years of schooling and the unfavorable reactions of others--the disappointment of parents, the dissatisfactions of teachers, and the possible mocking from peers--as well as personal feelings of incompetence are sure to have some effect upon the personality growth and emotional adjustment of the child. In fact, Kvaraceus (1971) suggested that "children who fail to learn to read and to achieve academically, experience school as a kind of public hell."

CHAPTER 2

A Selective Review of the Literature

Literature on the behavior and adjustment of poor readers in comparison with pupils who are progressing normally reveals that they differ in how well they are adjusted personally and socially. In this chapter generally descriptive terms outlining the emotional and behavioral traits of poor readers will be presented, the causal relationship existing between reading ability and emotional development will be examined, and a review of the experimental research related to reading failure and concurrent emotional adjustment patterns will be summarized.

General Description of Emotional and Behavioral Traits of Poor Readers

Clinical observations of remedial treatment work with these children describe them as over-sensitive to criticism, lacking in self-confidence, maintaining short attention span, and exhibiting feelings of insecurity, general state of tension, and resistance to remedial effort (Tulchin, 1935; Ephron, 1953; Witty and Kopel, 1935).

Bond and Tinker (1967) and Preston (1940) suggested that in working with most cases of reading problems in the classroom, it soon becomes apparent that they are laboring under some disturbing emotional stress. Symptoms typically characteristic are seen to take the form of shyness or retiring behavior, inability to concentrate, habitual nail-biting, a tendency to stutter, antagonism toward reading,

overdependence upon approval, discouragement and a lack of self-confidence which is evidenced by giving-up easily, irritability, or aggressive compensatory behavior which often draws the attention of other children and disrupts class activities.

Challman (1939) delineated and expanded the behavioral traits he projected as the most common maladjustments among reading disabilities as follows:

1. Nervousness-revealed by restlessness, squirming, or other obvious signs including irritability or silliness. In some cases the nervousness exists with little obvious surface expression.
2. Withdrawal or "leaving the field"-the pupil may leave the field in such obvious ways as playing truant or, in less obvious ways, such as mere daydreaming, failing to engage in the activity at hand, or giving only superficial or occasional attention to the lessons. In some fashion the pupil refuses to launch himself heartily into the effort to learn.
3. Defeatism-the child merely feels discouraged. He feels hopeless about his prospects. He may feel inferior.
4. Aggressiveness-the pupil may try to "get the teacher's goat". He may become mischievous and noisy or bully other pupils.
5. Chronic worry-the pupil may continuously or frequently worry about himself or his work in reading or about particular failures, as in an oral lesson or in tests.

Other writers, Norman and Darley (1959) and Bennett (1938), noted that retarded readers are unfortunately characterized to some degree by tenseness, aggressiveness, sensitiveness, apathy, withdrawal, anxiety, disorganization, and resistance and are frequently inclined to a solitary life.

Much overlap of descriptive characteristics can be seen among these portraits, with tension, insecurity, and aggressiveness particularly pervasive, and yet it has been maintained that no one clear pattern of adjustment patterns can be discerned as distinctive to disabled readers (Bond and Tinker, 1967). In addition, Gates (1941) stated that good readers are consistently superior to poor

readers in no single personality or emotional trait.

The Causal Relationship Between Poor Reading and Emotional Maladjustment

Some controversy exists regarding the possible causal relationship existing between reading problems and emotional maladjustment. Reading disability exists in all sorts of personality types, home backgrounds, parental relationships, and emotional patterns, and personality maladjustment or emotional tensions do not appear in all cases of reading difficulty. Gates (1941) estimated that among cases of very marked specific reading disability only about 75% will show personality maladjustment.

When reading disability is accompanied by emotional involvement, it becomes a question of whether the personality maladjustment is primary or secondary. Four possibilities exist:

1. an initial emotional problem producing the reading disability;
2. a disturbing and difficult introduction to learning to read, resulting in certain personality problems;
3. a compounded circular and reciprocal effect of the two--emotional factors and reading failure--yielding a composite impediment to growth in either area;
4. or the concurrent, but independent existence of reading problems and emotional problems.

There is no consensus among writers and investigators on this point. Reading difficulties are not usually the result of a single specific determinant, nor does the etiology of emotional difficulties lie in one solitary cause. Learning to read requires the synthesis of numerous skills including sound discrimination, form discrimination,

symbol interpretation, sound blending and closure, as well as the development of adequate vocabulary and comprehension skills. Likewise, when we speak of emotional adjustment we are implying a dynamic process, not an act or occurrence which takes place at a specific point in time. There is a continual and mutually corresponding influence between an individual and his social environment. The individual unconsciously builds his self-attitudes to reflect the love, acceptance and confidence--or lack of these--shown toward him by his parents and significant others (Gillham, 1967). The building and rebuilding of these attitudes towards self is constantly occurring to some extent throughout life. It is in these feelings in the conscious and unconscious attitudes towards oneself, that the individual's emotional health resides.

At one extreme of the causal question, investigating the relationship between reading and emotional development, is Gann (1945) who believes that every personality tension unfavorable to learning to read has arisen prior to entering school. The view that personality maladjustment may be due to reading disability is discarded by her. Missildine (1946) found that in the majority of thirty cases of emotionally disordered backward readers these disorders existed before the child entered school. These children were already insecure and restless and therefore predisposed to difficulties in school life. But, Cummings (1944) suggested that the frequency of symptoms of emotional instability is similar among backward readers and children generally at the time of entering school. He showed that minor symptoms were common at this age. About 37% of a group of 239 children, age six to eight years, showed lack of concentration, restlessness, laziness,

and tendencies toward daydreaming.

Goyen (1972) felt that emotional problems are responsible for reading failure in a very small percentage of cases, writing that a child must be very disturbed before his reading is affected. In her opinion emotional problems are more likely the result of the reading problem than the cause. Fernald's analysis (1943) of the school histories of 78 cases of extreme reading disability treated in her clinic revealed only four children who had given evidence of emotional instability before entering school. The other 74 cases were happy, well-balanced, and eager to learn when they entered school. With these the emotional upset occurred only when they were frustrated in their attempts at learning to read. Similarly, Wilking (1941), attempting to show how personality maladjustment is a causative factor in reading disabilities, reviewed 30 cases. She discovered, contrary to her purpose, only one case reported in which the reading disability was caused by prior emotional maladjustment. Mergentine (1963) further stated that although a large number of children with reading difficulties are basically normal bright youngsters who are just not reading as well as they should, none are happy or accepting of their lack of success. Inability to learn to read successfully is still an inability.

Gates (1941) suggested that personality maladjustment is the cause in about one-quarter of the cases and is the accompaniment or result in the other three-quarters. He and Blanchard (1928) maintained that the correction of the reading disability ordinarily results in better educational and social adjustment. With the substitution of success for failure in the environmental situation, the feeling

of inferiority is relieved, and the compensatory mechanisms are no longer needed. The behavioral deviations, therefore, usually disappeared.

A Review of the Experimental Research

Numerous points of view have been taken in experimental examinations of the poor reader's social and emotional adjustment patterns. Comparisons have been made on the basis of general achievement, instructional grouping technique, specific personality traits, overall adjustment patterns, and the sex of the individuals involved. Projective tests, case study and descriptive methods, and objective measures have been employed with groups of individuals ranging from elementary school age to post secondary educational levels.

General underachievement. General underachievement, which is most often a result of reading failure (Lee, 1933) has been viewed in its relationship to emotional and social adjustment. Brookover, Paterson, and Thomas (1962) studying a group of seventh grade boys and girls, found that self-concept of ability is significantly and positively related to school achievement and that a student's self-concept of ability is positively related to the image he perceives significant others hold of him when parents, teachers and peers are indentified as the significant others. Working with the same age group, Paschal (1968) compared two groups, achievers and non-achievers, on the basis of grade-point-average. He found that significantly more subjects classified as having adequate self-concepts were defined as achievers. Johnson (1971) in her work with third grade boys, supported the previous research findings that low-achievers were less well adjusted emotionally.

The underachiever's social adjustment seems to follow a similar pattern. Bennett (1938) discovered that the underachiever was more frequently inclined to a solitary life, found adjustment to school life difficult and unpleasant, and was subject to loneliness. Other descriptions include terms such as introversion (Rushton, 1966), withdrawal from social situations (Challman, 1939), preoccupation with ones own thoughts (Vorhaus, 1952), and shyness or retiring behavior (Bond and Tinker, 1967).

Preston studied the underachieving, reading failure as he functioned in his home situation, social world, and school world. One hundred children were chosen from the reading failures in grades 2 through 10 in the San Franscisco and Oakland schools. These children possessed average English vocabularies, normal intelligence (90-140) and exhibited no physical defects which might have led to maladjustment. A control group of 67 children with similar qualifications was formed. Through the use of personal interviews with children and parents, a mass of data was gathered relative to the aforementioned areas of social functioning. In contrasting the underachievers with the controls a significant difference was found regarding social adjustment. The results indicated that more than 50% of the academic failures experienced serious difficulties in getting along with their classmates and in socializing outside of the school setting. It was felt that behavioral and emotional difficulties which arose from the experience of reading failure interfered with the normal development of the children and served as a detriment to social adjustment.

Instructional grouping technique. In 1967 Dyson studied the influence of the two major techniques used to assign learners to class sections for instruction. Two seventh grade populations, matched on age, intelligence, academic achievement, school grades, school environment and socio-economic levels were compared. One group was assigned to a homogeneous group while the other was assigned to a heterogeneous instruction group. The basis for forming these groups was IQ, achievement tests, and teacher and principal evaluation of standing in reading and arithmetic. Each group responded to two instruments, the Index of Adjustment and Values (acceptance of self) and the Word Rating List (academic self-concept). Ability grouping alone did not appear to have a significant effect upon self-concept, however, when high and low achievers, on the basis of arithmetic and reading scores, were compared those in the achieving group reported significantly more positive self-concepts regardless of grouping.

Borg (1966) also investigated the effects of ability grouping. Over a two year period, he assessed 2500 pupils from grades 4,6, 7,8, and 9. He found that pupils, at all ability levels in randomly grouped classrooms tended to obtain more favorable Concept of Self scores on the Index of Adjustment and Values than did comparable pupils in ability grouped classrooms.

Mann (1960) obtained self-reports from 102 fifth graders who were part of an ability grouping system based on group IQ tests and reading tests. Two-thirds of the children in the system were able to identify which group they were in. In reviewing the self-reports it was found that the reports from the highest group contained no negative self-concept responses, but that the reports from the

lowest group contained only negative self-concept responses.

Levy (1969) found similar results in a longitudinal study of students in ability grouping systems in progressive and traditional school settings. He concluded that higher general anxiety existed in the lower streams of these systems.

Ogletree (1969) reviewing the literature of research conducted in England also found that pupils in the lower streams possess a sense of failure, resulting in a decline in morale, effort and attainment.

Examination of personality through projective techniques. Several investigators have employed projective techniques in their examinations of the poor reader's personality. Henderson, Long, and Ziller (1965) focussed on the disabled reader's perception of himself, specifically concentrating on the differentiation (recognizing self as distinct from others in the group), esteem (being held in high regard by significant others), and individualism (viewing initiative, action and interests of self as important) aspects of self concept. The non-achievers consisted of 32 boys and 16 girls, age 7 to 14, who had applied to the Reading Study Center, University of Delaware, for corrective training. Successful readers of the same age, sex and intelligence were selected from the public school to serve as control group. Several self-social tasks were administered. One of these was the "Line Task" in which subjects were given a paper containing a horizontal line. The principal score was the position of self, with a position to the left representing esteem. Other such tasks were given, each related to various aspects of self-social feelings. The main conclusion drawn from this study was that retarded readers are characterized by a relatively high degree of dependency,

and possessed a high proportion of defensive reactions.

Spache (1957) reviewed the clinical records of 125 children who were functioning on a reading level at least one year below their grade placement. All had received the children's form of the Rosenzweig Picture-Frustration Study. These retarded readers were found to be significantly more hostile and overtly aggressive toward others. They tended to meet frustrating situations head-on with little insight into their contribution to the conflict and with little concept of how to solve the situation other than to defend themselves by attacking. These children were hypersensitive to adverse criticism or failure, responding with defensiveness or counter-aggression. They held definite feelings of being discriminated against. Test results suggested that the retarded reader's relationship to authority figures would be characterized by resistance to adult suggestion and lack of interest or passiveness toward any remedial program offered them.

It was possible to differentiate five groups among the poor readers as follows:

-an aggressive hostile group in conflict with authority figures,

-an adjustive group which seeks only to be inoffensive,

-a defensive group that is sensitive and resentful,

-a solution-seeking or peace-making type,

-an autistic group characterized by blocking or withdrawal.

Similar to Spache's study was that of Vorhaus (1952). She described Rorschach findings in 309 reading disability cases tested at the New York University Reading Institute. Emphasis was placed on interpersonal dynamics and on the evidence, offered

by the Rorschach, that different individuals, reacting to the same environmentally-conditioned disturbance, in this case reading difficulties, have worked out various kinds of adaptation, each resulting in certain specific personality trends. Four adaptive configurations became evident:

1. Inhibition and constriction play the concomitant role. Need to repress is important in adaptation to life. There is no real zeal to succeed. Efforts are mechanical and lacking in spark. The individual's real interest is in the approval which comes as a reward for learning, and not in learning for its own sake. Conforming is important for approval.
2. Self-preoccupation and ego-centricity are the major factors in this adaptation. Learning and achievement, being outside the realm of this preoccupation are therefore essentially unimportant.
3. Withdrawal of affect has taken place in this adjustment pattern. The individual reacts submissively but feels strong inner rebellion. Stress placed on reading by the environment has vested it with new meaning. Reading ability has become a symbol of participation in cultural demands. Since these demands are experienced as threatening to the Ego, such participation becomes intolerable. This adaptation is an attempt to resist them without open friction.
4. Expectation of failure is present in approaching the task in this configuration. Attention and concentration difficulties arise as a by-product of tension and conflict.

Abrams (1956) also used Rorschach findings, but in addition examined results of the Brown Personality Inventory and a general social adjustment description of 50 children in grades three to seven. He found non-readers were more impulsive, had more attention difficulties and showed poorer adjustment overall.

Examination of personality through objective measures. A number of studies have looked at comparative personality adjustment of poor and normal readers by employing objective measures. Norman and Darley (1959) in an effort to uncover discriminating patterns of adjustment existing in the population of inferior readers at the elementary school level, examined all Anglo-white males, with an

IQ between 84 and 116. These children were in the sixth grade in 14 schools in Albuquerque, New Mexico. These pupils were administered the California Achievement Test to obtain two extremes in reading ability. The superior group numbered 42, the inferior 41. Both groups received the California Test of Personality to provide information on adjustment. No difference was found in patterns of adjustment between the two groups, however, there was a definite difference in total adjustment, with the poor readers demonstrating consistently poorer adjustment in all areas. The researchers concluded that there was no difference in the kind of adjustment made by the two groups, but that there existed a strong difference in degree of adjustment.

Prior to this, Bouise (1955) compared two groups of seventh graders and obtained similar results. The findings, based on scores obtained on the Detroit Adjustment Inventory, indicated that retarded readers were less secure at home as well as at school; that the total adjustment was better for superior readers; that the better readers were not completely free of maladjustment symptoms, but that these were neither as frequent or as pronounced as those of poor readers; and that most poor readers were fully aware of their reading difficulties. The highest score on adjustment factors was always made by a good reader, while the lowest score was always made by a poor reader. Median scores of good readers surpassed those of poor readers in all areas.

Rushton (1966) in a British study, assessed a large sample of 458 boys and girls, aged 10 and 11, all of whom had IQ's of 105 and above. Correlations were made between variables of the

Children's Personality Questionnaire (Cattell), the Moray House Achievement tests and the Teachers'Rating Scale of Fourteen Personality and Ability Traits. One of the findings of this research is quite definitely that in children of 11 years of age, stability is positively correlated with academic success. It was also found that extroverted children tend to have higher scholastic attainment.

Frericks (1971) sought to discover whether the level of self-esteem of black children living in a lower-social-class neighbourhood was associated with academic success in school, as was the association with white children. He assessed 78 sixth grade Negro children from a large mid-western inner city area. The results show that the youngster who had a high degree of school success as measured by grade-point-average and reading level scored significantly higher on the Self-Esteem Scale adapted from Rosenberg, than did the less successful students. No differentiation was evident, however, when high and low IQ groups were compared on the Self-Esteem Scale. It seems that IQ scores are not as visible to the youngsters whereas reading plays a central role in school learning and teacher marks and comments are evident throughout the school year.

Reading difficulties are still prevalent at the high-school age, however, different influences have begun to act upon the individual. As he grows nearer to adolescence the peer group elevates in importance and scope of influence. Out-of-school activities take more of the student's responsibilities and interests. These changes may make variations in the relationship between reading and personality, however, examination of the relationship becomes more difficult because, at this level reading and achievement are not frequently

differentiated.

Berman and Eisenberg (1971) examined a large group of high school students in an attempt to define the psycho-social characteristics that differentiate the more successful person within this group. Extensive data was collected on the 270 grade 11 students from Montreal. The data included a measure of personality, the California Psychological Inventory, and school marks. The correlation between these two values indicated that a number of personality traits were relevant to the topic of achievement at the high school level. The traits most significant were in the areas of motivation, sense of well being, independence, and conformity.

Shaw and Grubb (1958) and Shaw and Alves (1963) also concentrated on the high-school population, but directed their attention more specifically towards hostility and negative self-concept respectively. Corroborating the findings of previously reported literature, these studies indicated that a direct association exists between negative self-attitudes and hostility, and academic achievement.

Dispenzieri, Kalt, and Newton (1967), looking at the personality traits of poor readers in adulthood, compared scores on the Omnibus Personality Inventory with grade-point-average. Two hundred thirty one males entering a school of business administration were divided into high, middle, and low achievement groups. A comparison of the personality profiles of these groups indicated that significant differences existed on the traits of flexibility and autonomy. The achievers presented a picture of constraint, order and conformity, tending to utilize a more rigid approach in perceiving and organizing phenomena, to display less tolerance for ambiguity and uncertainty, to display a degree of intellectual conservatism, and to be accepting

of institutionally imposed authority. It must be remembered, however, that the homogeneity of interests of this group--all students in business administration--might have some effect upon the personality factors.

A group of students comparable in age to those seen by Dispenzieri, Kalt, and Newton, were treated at the Reading Clinic, Stephen's College, Columbia, Missourri. They were described by the reading clinicians, Hilts, Cass, and Chaisson, in an article by Wiksell (1948):

1. Of all the students possessing reading defects sufficiently serious to be referred to the reading clinic for further diagnosis and treatment and who were then referred to the psychiatric services by the reading clinicians, half were found to have emotional difficulties.
2. Of all the students with certain maladjustment problems who were referred by instructors and others, to the psychiatric services, and without any knowledge of the reading clinicians' action, the majority had a reading level of seventh grade or less.
3. Most of the students who were detained in the clinic and who had reading difficulties were found to have introversive behavior patterns with marked feelings of inferiority, immature personalities, broken drive, feelings of insecurity, and poor social adaptation.

Carter (1967) selected from the files of a Reading Clinic, 35 white males, 19 years of age or older, who had been out of high school one or more years. Based on the results of standardized achievement tests, the group was divided into a retarded and a non-retarded reading group. An instrument was developed which would assess the degree to which the individual was cognizant of, integrated with, and participated in his environment. Carter's analysis of results supported the notion that the personal and social maladjustments which were prevalent in school as concomitant of reading retardation persist into adult life.

Examination of personality through value assessment. In personality assessment an individual may be described by what he characteristically does in particular situations, that is, in terms of the traits that typify his behavior. In addition, he may be described in terms of his basic motivational patterns, or the values that he holds. These values will determine what, at any time, interests the individual, forming the pattern of his behavioral drives (Pepper, 1958). These drives, in turn, form the yardstick by which the individual assesses his satisfactions in and with life (Rescher, 1969).

The research examining the poor reader's or the underachiever's personality through value assessment is limited. Literature on values is generally descriptive or involves a discussion of value formation due to specific external learning situations rather than assessing or describing value attainment through inner changes, personal growth, or personal experience.

Lang (1971) stated that an individual's values may be created or changed by reason or insight as well as experience, and, Murray (1951) suggested that we can obtain values through the imagination of having an experience as well as through having the experience itself. Eriksen (1953) outlined a series of growth steps to value acquisition as the individual encounters a widening social radius. According to him, the individual moves through values of trust, to values of autonomy, to values of initiative. The idea of "growth steps" was also touched upon by Maslow (1968), who stated that we can discover which values men trend toward as they improve themselves

and which values they lose as they become sick. The writings of Ericksen and Maslow would seem to suggest that values can be placed in a hierarchy defining levels of growth or personal health.

Since individuals are motivated by what they value, it can be assumed that their behavior and personality traits would reflect the values they adhere to. Therefore, by reviewing the personality profiles of poor readers, it may be possible to speculate upon what they would value. In light of the literature on the personality traits of poor readers it would seem that the values possessed by the poor reader would be "lower" in a hierarchy of interpersonal values than the values possessed by the better reader.

The values presented in the SRA Survey of Interpersonal Values--support, conformity, recognition, independence, benevolence, and leadership--are presented in an order that corresponds with Eriksen's steps of trust, autonomy, and initiative. Of these values, it may be postulated that the poor reader would value the ones at the "lower" end of the order, comparable to the beginning steps of value attainment. The better, in his better adjustment, would value the ones at the "higher" end of the order.

Differences in male and female reaction to reading failure. Some evidence was found to support the fact that male and female underachievers do not respond in a similar fashion. Bledsoe (1964) reporting on the self-concept of fourth and sixth grade boys and girls, utilized the scores of the California Test of Mental Maturity, The California Achievement Tests, the What-I-Like-To-Do Inventory, and the McCandlers and Castaneda adaptation of the Taylor Manifest Anxiety Scale. He found correlations between self-concept scores and achievement for males in all areas of reading performance, but for females the correlation with self-concept existed only on comprehension tasks.

More recently, Glick (1972) made comparisons between two groups of third grade children One group performed below and the other at or above the expected reading norm. Data were obtained at the beginning and the end of the third grade to note changes regarding general self-concept, academic self-concept, attitudes towards teachers, attitudes towards school in general, as well as fifteen scales of perceived parent behavior and four attributes of classroom peer relations. Approximately 140 males and 130 females were involved. The results showed a relationship between reading status and changes during the year in certain social-emotional characteristics. The nature of the relationship was typically different for males and for females. In general, negative consequences were incurred by poor reading males, while few social-emotional benefits occurred for good reading males. Females, in contrast, obtained social-emotional benefits from being good readers, but incurred few negative consequences if they were poor readers.

This supports findings of Shaw and Alves (1963) who expanded these theories at the high-school level. They found that male underachievers reported more negative self-concepts than achievers and were less self-accepting. They perceived others as being less self-accepting than did achieving males. Female underachievers did not differ from achievers on any self-concept measurements, but did differ on views of how others perceive themselves. They were negative in their perceptions of how others perceived them and were also negative in their views of self-acceptance of others of themselves.

It seems that females do feel some stress from failure in reading, but either because of less achievement orientation or more positive reaction from the teacher (Good and Brophy, 1972) they suffer less emotional distress.

Raygor and Wark's work (1964) with college students maintained this idea. In their comparison of MMPI profiles of poor readers and normally achieving readers the males in the low reading group were typically more poorly adjusted, while these differences were not as obvious for females.

Summary of Findings

1. Children who fail to learn to read adequately suffer the negative reactions of parents, teachers, and peers.
2. Approximately 15% of the school population have varying degrees of reading disability.
3. Failure in reading is the most frequent cause of school failure.
4. Four possible relationships exist between reading and emotional adjustment:

-an emotional problem produces the reading problem,

-difficulties in learning to read produce emotional problems,

-poor emotional adjustment and reading failure reciprocally impede growth in either area,

-or concurrent, but independent, problems exist in the areas of reading and emotional development.

5. The correction of reading disability ordinarily results in better educational and social adjustment.

6. Literature on the behavior and adjustment of poor readers in comparison with pupils who are progressing normally reveals that they differ in how well they are adjusted emotionally and socially, however, no one clear pattern of adjustment can be discerned as typical of the poor reader. The researchers and authors have focussed upon numerous different aspects of the personalities of poor readers:

Sociability. Preston (1940) found that the poor reader experienced serious difficulties in getting along with classmates. Vorhaus (1952) and Challman(1939) described him as withdrawn, while Spache (1957) used the term "autistic". Bennett (1938) stated that the poor reader tends toward a solitary life of loneliness. Hines (1964) found that underachieving high-school seniors scored lower on the sociability scale of the Gordon Personal Profile, and, Norman and Darley (1959) and Bond and Tinker (1967) generally aggreed in describing the poor reader as less sociable.

Maturity. The characteristics of impulsivity (Abrams, 1956), egocentricity (Vorhaus, 1952), and overdependence (Preston, 1940)

have been attributed to the poor reader.

Conscientiousness and self-discipline. The poor reader was seen to have attention difficulties (Abrams, 1956), poor concentration (Bond and Tinker, 1967) and disorganized habits (Norman and Darley, 1959), while the better reader is described as maintaining a pattern of order and constraint (Dispenzieri, Kalt, and Newton, 1967).

Aggressiveness. The poor reader is said to maintain aggressive-defensive reactions (Henderson, Long and Ziller, 1965), aggressive compensatory behavior (Preston, 1940) and aggressive mischief or bullying (Challman, 1939). Spache (1957) and and Shaw and Alves (1963) parallel hostility and overt aggressiveness in the poor reader, while Kvaraceus (1971) points to the norm-violating aggressivity exhibited by poor readers.

Sensitivity. Norman and Darley (1959) described the poor reader as oversensitive in general terms, while Ephron (1953) and Spache (1957) saw him as hypersensitive to adverse criticism.

Apprehensiveness and fretfulness. A general state of tension was seen to characterize the poor reader in the writing of Witty and Kopel (1935) and Norman and Darley (1959). He was also described as maintaining feelings of insecurity (Tulchin, 1935), nervousness and chronic worry (Challman, 1939) as well as a lack of self confidence (Ephron , 1953).

Enthusiasm. Extroverted and enthusiastic children tended to have better reading attainment (Rushton, 1966), whereas

expectation of failure (Vorhaus, 1952), apathy (Norman and Darley, 1959), and defeatism (Challman, 1939) describes the poor reader. Berman and Eisenber (1971) found motivation closely related to reading performance agreeing with Vorhaus (1952) that the poor reader's efforts were mechanical, lacking in spark, and with no real zeal to succeed.

Brightness. Spache (1957) stated that the poor reader met frustrating situation with little insight into his involvement and little concept of how to solve the situation.

7. Male reaction to reading failure was typically different from female reaction in that males possessed more negative self-concepts (Bledsoe, 1964 and Shaw and Alves, 1963), incurred more negative social-emotional consequences (Glick, 1972), and were generally more poorly adjusted (Raygor and Wark, 1964).
8. No research describing the poor reader's interpersonal values could be found in the literature. It was assumed that poor readers would maintain values on the lower end of a hierarchy of interpersonal values.
9. The poor reader in a streamed setting suffered emotional and social maladjustments (Mann, 1960; Borg, 1966; Dyson, 1967; Levy, 1969; and Ogletree, 1969).

CHAPTER 3

Overview of the Study

Problem

It is the personality patterns that accompany failure in reading which are of major interest in this investigation, which specifically views the personality characteristics of individuals who have experienced reading failure into early adolescence. Proposed is an examination of numerous attributes of the poor reader in a special setting designed to relieve the stress placed on academic achievement and de-emphasize the failure in reading that these students have experienced. Multivariable measures will be employed with the aim of uncovering any discriminating patterns of social-emotional adjustment expressed by interpersonal values, specific personality traits, status in peer relationships, and teacher evaluation of general adjustment.

Hypotheses

1. A group of poor readers will provide evidence of personality profiles indicating overall adjustment below that of the norm.
2. A group of poor readers will provide evidence of value profiles different from those of the norm.
3. The personality characteristics of sociability, brightness, maturity, enthusiasm, conscientiousness and self-discipline as measured by the IPAT Junior-Senior High School Personality Questionnaire will appear significantly higher on the personality profiles of better readers when compared to the profiles

of poorer readers. Aggressiveness, sensitivity, apprehensiveness, and fretfulness will appear significantly higher on the personality profiles of poorer readers when compared to the profiles of better readers.

4. The values of independence, benevolence, and leadership, as measured by the SRA Survey of Interpersonal Values, will appear significantly higher on the profiles of better readers when compared to the profiles of poorer readers. The values of support and conformity will appear significantly higher on the profiles of poorer readers when compared to the profiles of better readers.
5. Peers will chose better readers for positive personal relationships and for leadership positions significantly more often than they will chose poorer readers. Peers will, however, chose poorer readers for negative personal relationships significantly more often than they will chose better readers.
6. Teachers will rate better readers as individuals with significantly more positive social and emotional adjustment.
7. In comparing a group of poor reading males to poor reading females, the females will be significantly more individualistic; the males will value conformity to a significantly greater degree; the females will be significantly more sociable; while the males will be significantly more apprehensive and sensitive. The females will also be rated as significantly better adjusted on a teacher rating of social and emotional adjustment.

Rationale

Understanding the personality and adjustment patterns of inferior readers becomes important when we realize that modifications in educational theory and practice are needed to decrease the liability of emotional maladjustment in childhood and youth and that changes in the upbringing of children and extensions of educational provisions would seem to be necessary to increase the chances of mental health in maturity. Only with knowledge can more appropriate directions be taken in making these changes.

Knowledge of the shared characteristics of individuals with reading difficulties and of the possible causal relationships existing between reading disabilities and emotional and social adjustment should be of value to teachers, counsellors, or psychologists working in therapeutic and remedial settings devoted to treatment of academic difficulties, emotional disturbances or social maladjustments. For, restoration of function is the ultimate aim of every corrective procedure and, the methods used are most effective when their application is causal rather than symptomatic (Sylvester and Kunst, 1943).

Many factors contribute, each in their own way, to a comfortable psychological climate in which children can feel secure, feel valued as individuals and experience personal growth. This fact has long been recognized. Individuals are many-sided. They have bodies to be maintained and exercised, senses to be trained, skills to be acquired, powers of thought and imagination to be developed, emotions to be controlled, social responsibilities to be understood, tastes to be refined and characters to be organized. Education also, therefore, has to be many-sided, but there is a complementary truth which

it is perilous to neglect, namely that an individual normally functions as a whole person. The various aspects of his experience are not unrelated or without influence on one another. Adequate treatment involves clear recognition of all factors that determine the problem.

There is adequate research outlining the personality characteristics of poor readers in a setting where they must relate to their failure continually. However, little research is found investigating the poor reader in a setting designed to relieve the stress of failure and de-emphasize the importance of reading skills. If such a setting is proving to be helpful in rebuilding the social and emotional strengths of reading failures, knowledge of this would be valuable.

CHAPTER 4

Research Design and Procedure

The Sample

Students from W.P. Wagner High School constitute the sample. As a group they can be described as those students possessing learning problems, those not able to progress in their school programs and school settings.

Pupil recommendations for consideration in the program are made by counsellors or school principals. The Admissions Committee for the W.P. Wagner program reviews the recommendations looking at demonstrated learning problems with the student generally one year or more behind the peer group; age, which must be 15 years or older; motivation to co-operate, with the student wanting to attend the school and his parents indicating that they wish him to attend and participate in the program; and IQ which is generally within the low-normal range of 85-110.

The students at W.P. Wagner are grouped in three instructional levels on the basis of age and performance. All new-comers to the program are placed in year one for a period of assessment, vocational exploration and academic rehabilitation to bridge the gap between the level of functioning and the level required for high-school classes to be taken in years two and three. In year two specific vocational areas are chosen to be pursued in depth and high-school courses are begun. Year three is a specialty year, one of vocational skill building. Academic pursuits during this last year may reach the level of eleventh grade work.

Nine classes, three from each instructional level, a total of 151 students, participated in the project. Reading scores were obtained on all 151 students, however, due to absenteeism, the full battery of test results was obtained on only 142 students, 46 from first year, 47 from second year, and 49 from third year. Of these, four were eliminated from the sample to maintain equal influence upon data from each level. All those not completing the battery scored near median reading scores, not extremes, so hopefully would not bias the sample. Test scores for the statistical analysis were provided by 138 subjects, 79 male and 59 female.

On the basis of age and IQ the sample is described in Table I. On the basis of reading level the sample is described in Table II.

The Procedure

A list of proposed topics, composed by the Principal of W.P. Wagner High School and members of the Edmonton Public School Board, had been circulated at the University of Alberta, to incite interest for research at W.P. Wagner School. Among the topics was one involving the investigation of the relationship between reading levels of Wagner students and other variables including academic achievement, interpersonal or social effectiveness, attitudes, self-esteem, and additional related areas. This topic was of interest to the researcher.

The ideas and research design thus originated with the W.P. Wagner school staff and the Edmonton Public School Board and were felt to be important to a better understanding of the students of a special school.

To fulfill the design a number of tests were reviewed and the ones presented in the battery were the result of some screening,

Table I

Ages and IQ's of Sample Groups

		Range	Mean
Total Group	Age:	15-20	16.68
Total Group	IQ:	87-112	98.44
N=138			
Female	Age:	15-19	16.27
Female	IQ:	88-110	97.22
N=59			
Male	Age:	15-20	16.80
Male	IQ:	87-112	98.73
N=79			

IQ scores are based on previously administered Wechsler, Stanford Binet, and Lorge Thorndike tests.

Table II

Ages and Reading Levels of the Sample Groups

	AGE		READING LEVEL		YEARS BEHIND
	Average	Range	Average	Range	Average
Year I	15.82	15-19	5.81	3.6-9.1	4.19
Year II	16.65	16-19	6.21	4.2-9.2	4.79
Year III	17.92	17-20	6.77	3.7-9.5	5.23

Reading scores are based on previously administered Schonell Reading Tests.

taking into account the time factor and the students involved. Two of the tests are standardized, two were modified to accommodate the situation, and one, the sociometric measure, was developed after studying that assessment technique.

Nine classes, three from each of the three instructional levels, were randomly chosen by the counsellor of the school for participation in the study.

A meeting, including the counsellor, the five teachers of the participating classes, and the researcher, was called. During this meeting the teachers were asked to review the examinations chosen to comprise the test battery. All tests and procedure were approved.

The battery of tests was administered to the 151 participating students during the first week of June, 1971. Testing was done by the researcher with the aid of classroom teachers.

The students were seen during the regular fifty minute instructional periods throughout the day in their own classrooms. It was explained to the students that the examination results were to be regarded in groups, not individually, so that scores on these tests would in no way reflect upon the students' grades or report cards. It was to be viewed entirely as a research project.

It was further explained that none of the tests would be restricted by time limits, all students would be given sufficient time to complete the tests. It was hoped that the test battery would be completed in an atmosphere of limited tension.

Instructions for each test were read and examples were given by the researcher (see Appendices). The classroom teacher was then left to supervise and answer the students' questions

while the researcher initiated testing with the next groups.

The testing schedule was set up as follows:

		Time Requirement (more time allowed)
Day One:	Reading Test Part I	45 minutes
Day Two:	Reading Test Part II	45 minutes
Day Three:	HSPQ (Personality Test)	45 minutes
Day Four:	Sociometric Measure	10 minutes
	Survey of Interpersonal Values	15 minutes
Day Five:	Completion of any tests unfinished or missed.	

The Teacher Rating Scale was completed during the test week by respective classroom teachers.

All tests were then collected and scored by the researcher. Further to this, records were researched at the school and at the Edmonton Public School Board Records Department to obtain grade scores on the Schonell Word Reading List, which all student had previously completed. These scores served as the basis for Table II. Birthdates and IQ measures, as assessed by previously administered Wechsler, Stanford Binet, and Lorge Thorndike tests, were also obtained. These served as the basis for Table I.

The test information was then subjected to analysis through the programs provided by the University of Alberta Computing Services. Group means were computed for each variable and compared to the norms on norm based tests when applicable. A correlation of the reading test scores obtained from the sample and the previously obtained Schonell scores was performed. The sample was divided into poor and better readers by ranking the subjects, each instructional level

separately, according to reading scores. The groups were then split in half, thus obtaining a high and a low group for each instructional level. An analysis of variance was performed to test for difference between poorer and better readers on reading scores, age and IQ. An analysis of variance was then performed comparing scores of poorer and better readers on all variables. The sample was then divided into the male and female groups. An analysis of variance was performed comparing scores of males and females on all variables. The level of significance for testing the hypotheses was set at .05.

The Instruments

The test battery was composed of five measures designed to assess silent reading ability, personality traits, peer status, interpersonal values, and teacher opinion of student adjustment.

The Diagnostic Test of Silent Reading Abilities (Modified). Although this test was developed to provide diagnosis of specific elements or phases of reading ability, it was also described by Wagenen and Dvorak (1940), in the test manual, as one which is effective as a means of understanding group tendencies. It is in this capacity that the Diagnostic Examination of Silent Reading Abilties was employed. It is on the basis of results from this test that the sample was divided for comparison of social and emotional traits.

It is a very thorough test and its full administration requires two and one-half to three hours of time, as well as much effort from the individual being assessed. Since the diagnostic function of the examination was viewed as unnecessary for the purposes of this study, the test was modified, reduced by deleting every second question and reducing administration time to one and one-half hours. This

was administered in two sittings of 45 minutes each.

The final score, a raw score out a possible 128 correct answers, was employed as a differentiation score separating the students into a continuum of reading abilities.

The reading abilities assessed include:

Perception of relations. This consists of a set of items increasing in difficulty by approximately equal steps. Information as well as vocabulary used in the task was kept simpler than the relationship involved.

Vocabulary in context. Stimulus words were included in short sentences to give exact meaning. The five words from which one answer is to be selected are all more difficult than the stimulus word. This approximates the function of trying to think of the best word to express some meaning that one has in mind.

Vocabulary, isolated words. Stimulus words are provided. In each task, the five words from which one answer is to be selected, are all easier than the stimulus word.

Range of general information. The items for this scale were selected from many different fields of information that are not emphasized in classroom work, yet lie within the experience of school pupils.

Comprehension. The items in this section measure the ability to grasp the central thought of a paragraph, the ability to note clearly stated details, the ability to interpret the context of a paragraph, the ability to grasp an idea when it is spread through several sentences, and the ability to draw inferences from ideas in a paragraph. The content is drawn from a wide variety of sources

and includes as varied a vocabulary and sentence structure as is feasible to represent the general type of reading with which all students come in contact in all their classes and also in out of school reading.

The Junior-Senior High-School Personality Questionaire (HSPQ). This is a test the whole design of which is aimed at giving the maximum information in the shortest time about the greatest number of dimensions of personality (Cattell and Beloff, 1962).

The questionaire is primarily intended for an age range of 12 through 17 and demands the normal reading ability of an average child of 11. If any difficulties occur it is not considered to alter scoring if words are explained or questions read aloud. Nor has any motivational distortion or deliberate faking for more favorable test impression been found.

The HSPQ is planned for administration either in group situations or in individual testing sessions. It requires a multiple-choice answer to 142 questions regarding the individual's interests, feelings, likes, and dislikes, and provides information on 14 distinct personality traits: sociability, brightness, maturity, excitability, aggressiveness, enthusiasm, conscientiousness, spontaneity, sensitivity, individualism, apprehensiveness, self-sufficiency, self-discipline, and fretfulness.

A hand scorable answer sheet is used and the time required for administration is approximately forty minutes. Results are given in stens, standard scores based on the ten point scale.

The Survey of Interpersonal Values. The Survey of Interpersonal Values attempts to provide measures of what the individual considers

to be important, what he values in his relationships with other people and in their relationships with him. The scales are defined by what high scoring individuals value. The values assessed include:

Support-being treated with understanding, receiving encouragement from other people, being treated with kindness and consideration.

Conformity-doing what is socially correct, following regulations closely, doing what is accepted and proper, and being a conformist.

Recognition-being looked up to and admired, being considered important, attracting favourable notice, and achieving recognition.

Independence-having the right to do whatever one wants to do, being free to make one's own decisions, being able to do things in one's own way.

Benevolence-doing things for other people, sharing with others, helping the unfortunate, being generous.

Leadership-being in charge of other people, having authority over others, being in a position of leadership or power.

The Survey of Interpersonal Values is brief, requiring about 15 minutes to administer. Forced choice format is employed. The instrument consists of 30 sets of three statements. For each of these the respondent indicates one statement as representing what is most important to him and one statement as representing what is least important to him. Within each set of statements the three value dimensions are represented in statements equated for social desirability as far as possible. In this way the likelihood of the individual's responding to the favorableness of the statement rather than to its degree of importance to him is reduced.

The survey is self-administering. All directions are given

in full on the title page of the booklet. The respondents read the directions silently while the examiner reads them aloud. There is no time limit.

In scoring, each item is keyed on its appropriate scale in the following manner: if it has been marked "most" it will receive a weight of two, if unmarked a weight of one, and if marked "least" a weight of zero. Interpretation of scores is made by reference to norms prepared for each of the scales. All norms are presented in percentile form.

The Sociometric Measure. The sociometric method of studying group structures was developed by Moreno in 1934 (Krech, Crutchfield, and Ballachey, 1962). As originally used by him, the objective of this method was to establish the pattern of feelings of acceptance and rejection, of like and dislike, that exists among the members of a group. The method involves asking each member of a group to name privately the other persons in the group with whom he would like, and with whom he would not like, to engage in some particular activity. Since the preferences are voluntary, it is assumed that their frequency provides a good measure of group structure.

The sociometric preferences of the sample were investigated through a questionaire of seven inquiries each requiring an answer of two names. Its administration required approximately 10 minutes. The questions were to provide information regarding peer feelings in reference to positive personal relationships, leadership, and negative personal relationships.

The Teacher Rating Scale. The Teacher Rating Scale was designed as a service instrument to help teachers in understanding and managing

pupils. It requires teacher judgements of the child's adjustmental traits, including depression, irritability, maturity, aggressiveness, security, and impulsiveness.

Of the 11 questions one was discarded because it involved judgement of the child on the introversion-extroversion continuum, an extreme of either one considered to represent maladjustment. The anecdotal questions were also eliminated from the questionaire since they could not be scored for statistical analysis.

On the remaining 10 questions, five possible ratings, A, B, C, D, or E existed, with A representing the best adjustment and E the poorest. For scoring purposes E received a value of one, while A received a value of five, so that a low total score described relatively poor adjustment overall.

When using the scale on an individual basis, pupil graphs of characteristics are made. For the purposes of this study a total raw score was used to indicate the relative position of the child's overall adjustment, when compared to the balance of the sample.

CHAPTER 5

Results

Restatement of the Problem

It is the personality patterns that accompany failure in reading which are of major interest in this investigation, which specifically views the personality characteristics of individuals who have experienced reading failure into early adolescence. Proposed is an examination of numerous attributes of the poor reader in a special setting designed to relieve the stress placed on academic achievement and de-emphasize the failure in reading that these students have experienced. Multivariable measures will be employed with the aim of uncovering any discriminating patterns of social-emotional adjustment expressed by interpersonal values, specific personality traits, status in peer relationships, and teacher evaluation of general adjustment.

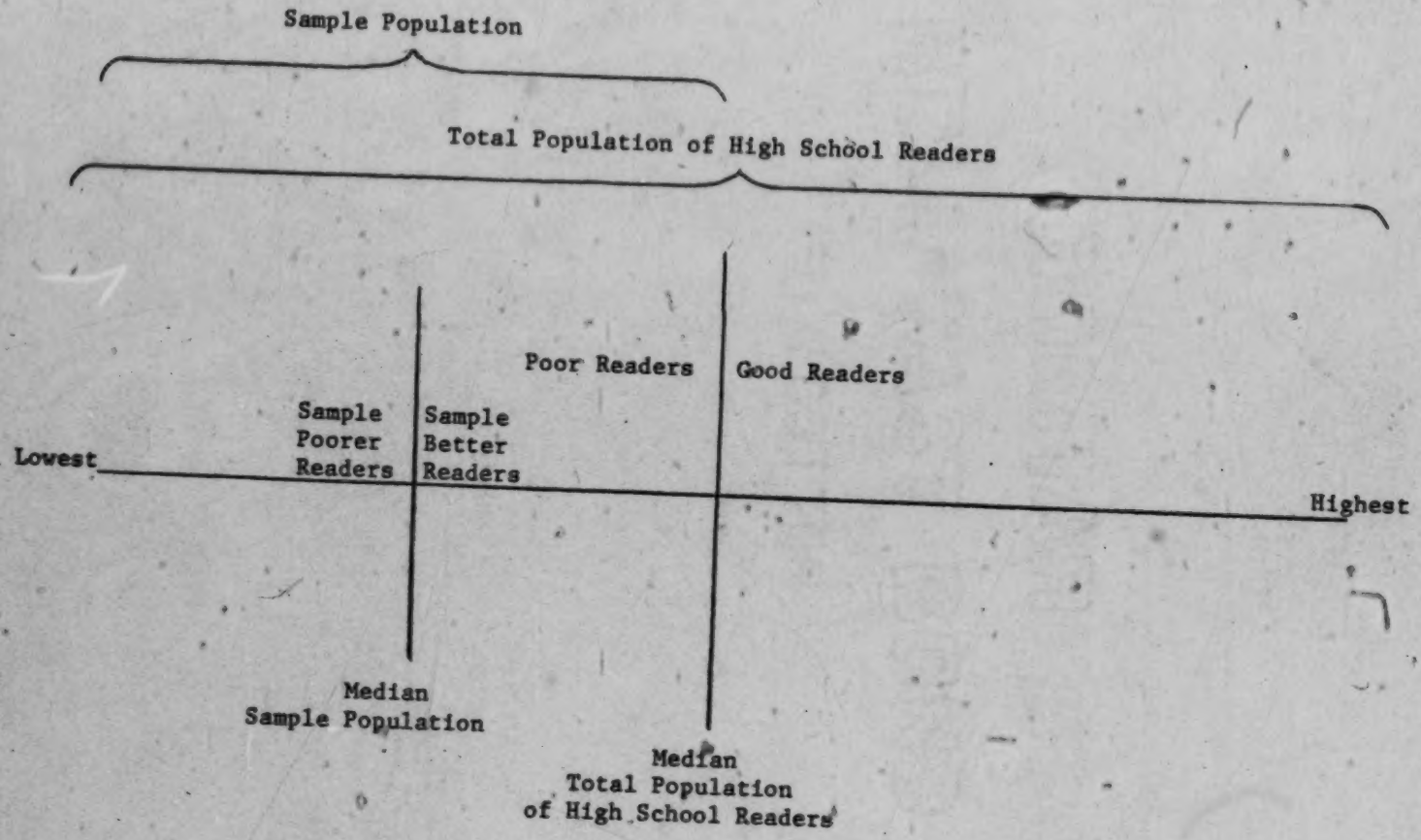
Hypothesis 1

A group of poor readers will provide evidence of personality profiles indicating overall adjustment below that of the norm.

For the major part of this study the sample was viewed as representing a continuum of reading ability from poor readers to better readers, however, these descriptive terms are relative. On the whole, the sample represented the lower end of the reading continuum for students of the high-school age group (see Figure I). The "better" readers in the sample would be below the median of the total population of high-school readers.

FIGURE I

COMPARISON OF SAMPLE READERS
TO THE TOTAL POPULATION OF HIGH SCHOOL READERS



All the students tested were poor readers. Based on the Schonell Reading scores obtained by the school at the beginning of the 1970-1971 school year, the year one students read at an average grade level of 5.8 which is 4.2 years below the expected, the year two students read at a grade 6.2 level, 4.8 years behind, and the year three students read at a grade 6.8 level, 5.2 years below the expected (see Table II).

These students are, however, within the average range on IQ measures. As seen in Table I, the IQ range based on previously administered Wechsler, Stanford Binet, and Lorge Thorndike measurements, was 87-112. The group mean IQ of 99.19 was not significantly different from the norm.

It was expected that this group as a whole would produce personality profiles indicating poorer adjustment overall than the norm, on the norm based test of personality, the HSPQ. This was not found to be true. The group mean for each personality trait was within the range of average expectancy, 4.5 to 6.5 on the sten scale (see Table III and Figure II).

Hypothesis 2

A group of poor readers will provide evidence of value profiles different from those of the norm.

This was not found to be true for the sample. The group mean for each interpersonal value on the norm based Survey of Interpersonal Values was within the range of average expectancy, percentile 32 to 69 (see Table IV and Figure III).

Table III

Sample Means for the HSPQ Personality Traits

HSPQ Personality Trait	Sample Mean (Stens)
Sociability	4.83
Brightness	4.51
Maturity	5.64
Excitability	5.29
Aggressiveness	6.05
Enthusiasm	5.17
Conscientiousness	4.88
Spontaneity	5.31
Sensitivity	5.34
Individualism	5.60
Apprehensiveness	5.14
Self-sufficiency	5.99
Self-discipline	5.17
Fretfulness	5.88

Norm average is 4.5 to 6.5 on the sten scale.

Figure II

HSPQ Personality Profile for the Total Sample

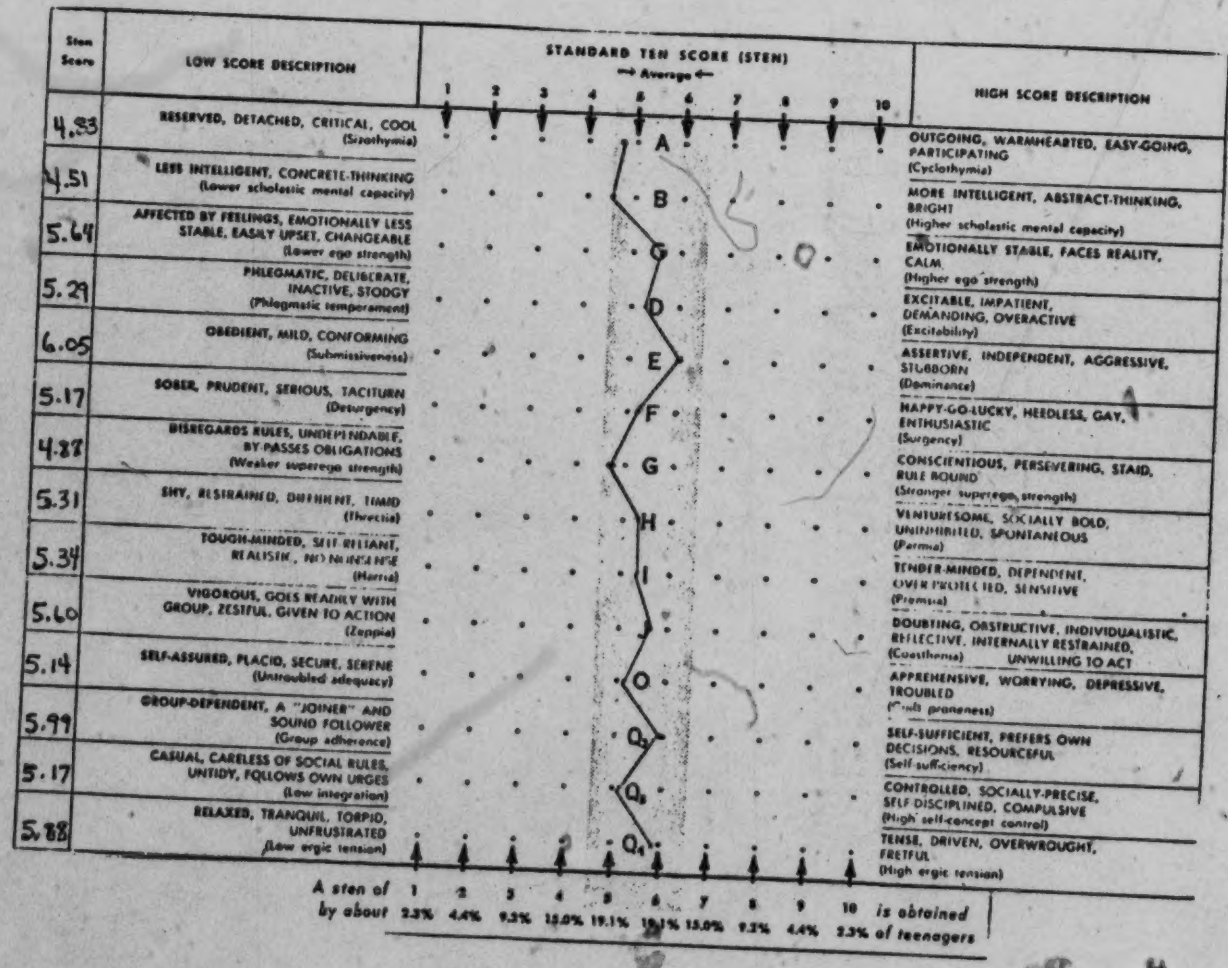

Sten Score
LOW SCORE DESCRIPTION
STANDARD TEN SCORE (STEN)
→ Average ←
1 2 3 4 5 6 7 8 9 10
HIGH SCORE DESCRIPTION
4.83
RESERVED, DETACHED, CRITICAL, COOL (Sizothymia)
A
OUTGOING, WARMHEARTED, EASY-GOING, PARTICIPATING (Cyclothymia)
4.51
LESS INTELLIGENT, CONCRETE-THINKING (Lower scholastic mental capacity)
B
MORE INTELLIGENT, ABSTRACT-THINKING, BRIGHT (Higher scholastic mental capacity)
5.64
AFFECTED BY FEELINGS, EMOTIONALLY LESS STABLE, EASILY UPSET, CHANGEABLE (Lower ego strength)
C
EMOTIONALLY STABLE, FACES REALITY, CALM (Higher ego strength)
5.29
PHLEGMATIC, DELIBERATE, INACTIVE, STODGY (Phlegmatic temperament)
D
EXCITABLE, IMPATIENT, DEMANDING, OVERACTIVE (Excitability)
6.05
OBEDIENT, MILD, CONFORMING (Submissiveness)
E
ASSERTIVE, INDEPENDENT, AGGRESSIVE, STUBBORN (Dominance)
5.17
SOBER, PRUDENT, SERIOUS, TACITURN (Desurgency)
F
HAPPY-GO-LUCKY, HEEDLESS, GAY, ENTHUSIASTIC (Surgency)
4.88
DISREGARDS RULES, UNDEPENDABLE, BY-PASSES OBLIGATIONS (Weaker superego strength)
G
CONSCIENTIOUS, PERSEVERING, STAID, RULE BOUND (Stronger superego strength)
5.31
SHY, RESTRAINED, DIFFIDENT, TIMID (Threctia)
H
VENTURESOME, SOCIALLY BOLD, UNINHIBITED, SPONTANEOUS (Parmia)
5.34
TOUGH-MINDED, SELF RELIANT, REALISTIC, NO NONSENSE (Harria)
I
TENDER-MINDED, DEPENDENT, OVER PROTECTED, SENSITIVE (Premsia)
5.60
VIGOROUS, GOES READILY WITH GROUP, ZESTFUL, GIVEN TO ACTION (Zeppia)
L
DOUBTING, OBSTRUCTIVE, INDIVIDUALISTIC, REFLECTIVE, INTERNALLY RESTRAINED, (Coasthenia) UNWILLING TO ACT
5.14
SELF-ASSURED, PLACID, SECURE, SERENE (Untroubled adequacy)
O
APPREHENSIVE, WORRYING, DEPRESSIVE, TROUBLED (Guilt proneness)
5.99
GROUP-DEPENDENT, A "JOINER" AND SOUND FOLLOWER (Group adherence)
Q_2
SELF-SUFFICIENT, PREFERS OWN DECISIONS, RESOURCEFUL (Self-sufficiency)
5.17
CASUAL, CARELESS OF SOCIAL RULES, UNTIDY, FOLLOWS OWN URGES (Low integration)
Q_3
CONTROLLED, SOCIALLY-PRECISE, SELF DISCIPLINED, COMPULSIVE (High self-concept control)
5.88
RELAXED, TRANQUIL, TORPID, UNFRUSTRATED (Low ergic tension)
Q_4
TENSE, DRIVEN, OVERWROUGHT, FRETFUL (High ergic tension)
A sten of 1 2 3 4 5 6 7 8 9 10 is obtained
by about 2.3% 4.4% 9.2% 15.0% 19.1% 19.1% 15.0% 9.2% 4.4% 2.3% of teenagers

Table IV

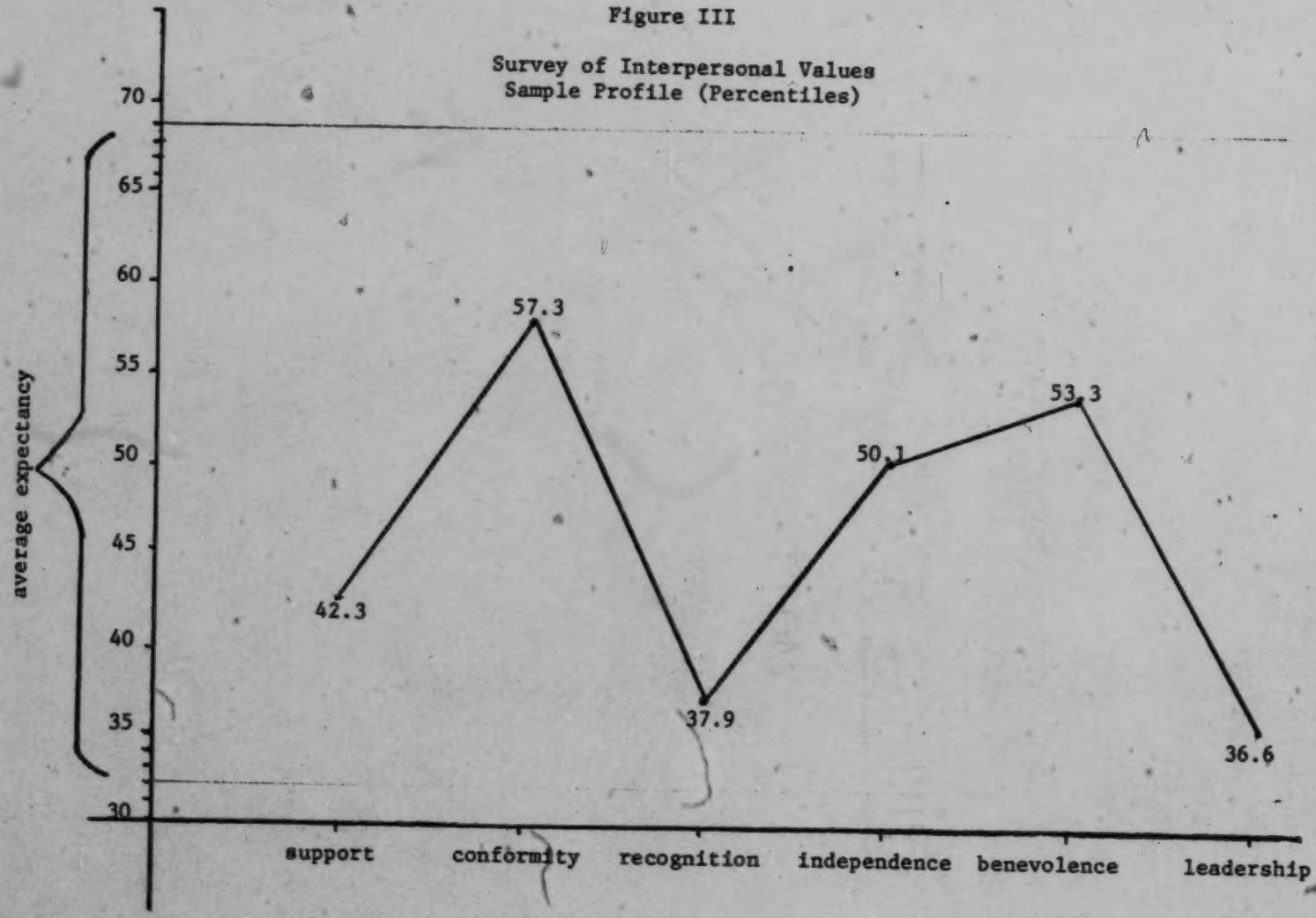
Sample Means for Variables from
Survey of Interpersonal Values

Interpersonal Value	Sample Mean (Percentiles)
Support	42.32
Conformity	57.33
Recognition	37.98
Independence	50.17
Benevolence	53.30
Leadership	36.68

Norm average is percentile 32 to percentile 69.

Figure III

Survey of Interpersonal Values
Sample Profile (Percentiles)



The sample was divided into poor and better readers by ranking the subjects, each instructional level separately, according to their reading scores on the Diagnostic Examination of Silent Reading Abilities. These reading scores correlated significantly, $p < .001$, with the previously obtained Schonell reading scores, $r=.615$. The groups were then split in half, thus obtaining a high and a low group for each instructional level. An analysis of variance was performed comparing scores of the poor and better readers on the reading test, comparing their ages and comparing IQ's.

Table V

Analysis of Variance Comparing the Reading Scores, Ages, and IQ's of Poor and Better Readers

Source of Variation	Mean Poor Readers	Mean Better Readers	F	Probability
Reading scores	45.54	63.13	13.397	0.0000
Age	16.78	16.81	0.149	0.4407
IQ	97.59	98.83	1.099	0.1366

The groups were found to be significantly different on reading test performance, however they were not significantly different in age or IQ scores. Comparisons for hypothesis 3, 4, 5, and 6 are based on the fact that these reading groups are significantly different in reading ability, but not in IQ. See Table V.

Hypothesis 3

The personality characteristics of sociability, brightness, maturity, enthusiasm, conscientiousness, and self-discipline, as measured by the IPAT Junior-Senior High School Personality Questionaire, will appear significantly higher on the personality profiles of better readers when compared to the profiles of poorer readers. Aggressiveness, sensitivity, apprehensiveness, and fretfulness will appear significantly higher on the personality profiles of poorer readers when compared to the profiles of better readers.

The 14 sources of variation and the mean scores, the F values, and the probabilities for each are listed in Table VI. It can be seen that five of the six variables expected to be significantly higher on the profiles of the better readers were significantly higher at the $p<.05$ level. Better readers were significantly brighter $F=2.267$, more mature $F=2.054$, more enthusiastic $F=1.784$, more conscientious $F=2.215$, and more self-disciplined $F=2.108$. However, better readers were not significantly more sociable $F=1.430$.

The four variables expected to be higher on the profiles of the poorer readers did not vary significantly. The poorer readers were not significantly more aggressive $F=0.245$, more sensitive $F=0.459$, more apprehensive $F=0.310$, or fretful $F=0.744$.

Hypothesis 4

The values of independence, benevolence, and leadership as measured by the SRA Survey of Interpersonal Values, will appear significantly higher on the profiles of better readers when compared with the profiles of poorer readers. The values of support and conformity

Table VI

Analysis of Variance Values Comparing the Personality Characteristics of Poor and Better Readers

Source of Variation	Mean Poor Readers	Mean Better Readers	F	Probability
Sociability	4.67	5.10	1.430	0.077
Brightness	4.17	4.91	2.267	0.005
Maturity	5.39	5.96	2.054	0.021
Excitability	5.22	5.46	0.904	0.184
Aggressiveness	6.06	6.13	0.245	0.403
Enthusiasm	4.99	5.45	1.784	0.044
Conscientiousness	4.61	5.22	2,215	0.014
Spontaneity	5.28	5.41	0.452	0.326
Sensitivity	5.46	5.32	-0.459	0.323
Individualism	5.74	5.57	-0.580	0.281
Apprehensiveness	5.23	5.14	-0.310	0.378
Self-sufficiency	5.91	6.13	0.692	0.245
Self-discipline	4.91	5.51	2.108	0.018
Fretfulness	6.04	5.81	-0.744	0.229

will appear significantly higher on the profiles of poorer readers when compared to the profiles of better readers.

The six sources of variation, the mean scores, the F values, and the probabilities for each are listed in Table VII. It can be seen that two of the five variables expected to vary significantly did so at the $p < .05$ level. Better readers valued independence, F=1.477, significantly more than did the poor readers, however, poor readers valued conformity, F= 2.594, to a significantly greater degree than did the better readers. The values of support, F=0.071, benevolence, F=0.513, and leadership, F= 0.782, did not vary significantly.

Hypothesis 5

Peers will chose better readers for positive personal relationships and for leadership positions significantly more often than they will chose poorer readers. Peers will, however, chose poorer readers for negative personal relationships significantly more often than they will chose better readers.

The three sources of variation, the mean scores, the F values, and the probabilities for each are listed in Table VIII. It can be seen that one of the three variables expected to vary significantly did so at the $p < .05$ level. Better readers were chosen significantly more often for leadership positions, F=1.873, than were poorer readers. Positive personal relationships, F= 1.417, and negative personal relationships, F=-0.028, did not vary significantly.

Hypothesis 6

Teachers will rate better readers as individuals with significantly more positive social and emotional adjustment.

Table VII

Analysis of Variance Comparing the
Interpersonal Values of Poor and Better Readers

Source of Variation	Mean Poor Readers	Mean Better Readers	F	Probability
Support	42.51	42.83	0.071	0.471
Conformity	62.64	52.41	-2.594	0.005
Recognition	38.01	39.07	0.246	0.402
Independence	46.35	54.65	1.477	0.041
Benevolence	52.58	54.74	0.513	0.304
Leadership	38.43	35.58	-0.782	0.218

Table VIII

Analysis of Variance Comparing the
Sociometric Choices of Poor and Better Readers

Source of Variation	Mean Poor Readers	Mean Better Readers	F	Probability
Positive Personal Relationship	4.19	5.10	1.417	0.079
Leadership	2,14	3.28	1.873	0.032
Negative Personal Relationship	2.36	2.35	-0.028	0.489

Table IX

Analysis of Variance Comparing the
Teacher Rating of Adjustment of Poor and Better Readers

Source of Variation	Mean Poor Readers	Mean Better Readers	F	Probability
Teacher of Adjustment	33.41	36.25	1.970	0.025

The mean scores on the Teacher Rating of Social and Emotional Adjustment, the F values, and the probability are listed in Table IX. It can be seen that better readers were rated as significantly more positively adjusted than the poorer readers, F=1.970. This value was significant at the $p<.05$ level.

Hypothesis 7

Im comparing a group of poor reading males to poor reading females, the females will be significantly more individualistic; the males will value conformity to a significantly greater degree; the females will be significantly more sociable; while the males will be significantly more apprehensive and sensitive. The females will also be rated as significantly better adjusted on a teacher rating of social and emotional adjustment.

The 26 sources of variation, the means scores, the F values, and the probabilities for each are listed in Table X. It can be seen that five of the six variables differed significantly as expected, at the $p<.05$ level. Females were found to be significantly more individualistic, F=2.444, males were found to value conformity to a significantly greater degree, F= 3.048, and to be significantly more sensitive, F=1.886. However, males rather than females were found to be significantly more sociable, F= 3.732, and females rather than males were found to be significantly more apprehensive, F=2.442. No significant difference was found between the two groups on the Teacher Rating of social and emotional adjustment, F= 1.223.

Five variables not expected to differ were found to do so significantly at the $p<.05$ level. Males scored significantly higher

on the reading test, F=1.682, and were also significantly more spontaneous, F=2.178, whereas females valued leadership to a significantly greater degree, F=3.031, and received a significantly higher rating on the sociometric measure for positive personal relationships, F=2.489.

Table X

Analysis of Variance Comparing the Variables for Males and Females

Source of Variation	Mean Male	Mean Female	F	Probability
Schonell Reading Score	6.21	6.28	0.303	0.3808
	55.77	52.41	-1.682	0.0474
Support	41.54	44.17	0.575	0.2828
Conformity	62.67	50.63	-3.048	0.0013
Recognition	38.27	38.92	0.150	0.4403
Independence	49.29	52.12	0.651	0.2578
Benevolence	56.01	50.51	-1.301	0.0975
Leadership	32.37	43.22	3.031	0.0014
Positive Relations	3.96	5.56	2.489	0.0070
Leadership	2.32	3.24	1.503	0.0675
Negative Relations	2.16	2.61	0.839	0.2012
Teacher Rating	35.59	33.80	-1.223	0.1116
Sociability	5.35	4.25	-3.732	0.0001
Brightness	4.76	4.64	-1.753	0.2930
Maturity	5.71	5.63	-0.290	0.3860
Excitability	5.23	5.49	0.957	0.1700
Aggressiveness	5.97	6.25	0.939	0.1745
Enthusiasm	5.29	5.12	-0.578	0.2817
Conscientiousness	4.77	5.10	1.172	0.1215
Spontaneity	5.61	4.98	-2.178	0.0155
Sensitivity	5.65	5.05	-1.886	0.0307
Individualism	5.34	6.07	2.444	0.0079
Apprehensiveness	4.90	5.58	2.442	0.0079
Self-sufficiency	6.14	5.86	-0.866	0.1938
Self-discipline	5.06	5.41	1.193	0.1174
Fretfulness	5.85	6.03	0.590	0.2780

CHAPTER 6

Discussion and Conclusion

Discussion

Literature on the research undertaken to investigate the personality patterns that accompany failure in reading produced some conflicting results, but generally indicated that the poor reader is less well adjusted socially and emotionally than the better reader. This study investigated the patterns of adjustment of the poor reader in a special setting for adolescents, completely separate from other normally achieving students.

The sample had experienced failure in school for a number of years. Although they possessed average intelligence (see Table I) they were described a students possessing learning problems--those unable to progress in their school programs and school settings. Records indicated that the group was 4.19 to 5.23 years behind grade level on the average (see Table II). The research literature suggested that the poor reader, even in a streamed setting, is less well adjusted socially and emotionally, thus, it was expected that the sample as a whole would produce personality profiles and value profiles indicating poorer adjustment overall.

This was not found to be so. The total sample of poor readers exhibited possession of no personality characteristic or interpersonal value to a degree significantly different from the norm. It may be that the homogeneity of the new setting, with the emphasis on the

importance of reading and achievement in scholastics reduced, has lessened stress and the accompanying compensations and maladjustment. It may also be that the removal of the students from the regular school setting, a situation providing the opportunity for constant comparisons of these students with normally achieving students, a situation sure to heighten the stress and anxiety felt by the poor achievers, has reduced the occurrence of personaltiy disturbances.

When the better readers among the sample were compared to the poorer readers, the former tended to be brighter, more mature, more enthusiastic, more conscientious, and more self-disciplined. This agrees with the findings of previously reported literature. It must be noted that these are primarily school performance related characteristics, lending themselves to the development of better study habits and subsequently better school performance. The presence of significantly more enthusiasm among the better readers may be explained by consideration of the fact that the better reader has a greater expectation of success (Vorhaus, 1952) and therefore more readily becomes involved in various activities and social situations. The poor reader's expectation of failure would lead him into more reticient reactions to new situations.

The better readers were expected to be significantly more sociable, because of the confidence that success experiences in a group builds, however, this characteristic was not possessed to a significantly greater degree by the better readers. The relative homogeneity of school backgrounds of these pupils would likely affect this factor. All the students have experienced failure, and it is unlikely that the forming of social groups in this setting is highly related

to scholastic ability.

Contrary to research findings reported in the literature, the poor readers in the sample were no more aggressive, sensitive, apprehensive, or fretful than the better readers. It may be that the situation of reduced stress on school performance, with opportunities for success experiences in the vocational training areas, has reduced the overall anxiety and produced a more relaxed student with a calmer outlook. As previously mentioned, the comparison factor has also been removed from the students' daily lives, eliminating reminders of failure.

The better readers were found to value independence to a significantly greater degree. It is possible that the age of the sample could affect this factor. When other matters are not overbearing, the adolescent generally shows concern for the freedom to make his own decisions and to do things his own way. These students were no exception. They were, however, not sufficiently in possession of their personal faculties to begin showing significant concern for others, either in terms of leadership or benevolence.

The poor readers seemed to be concerned most with being socially accepted, valuing conformity to a significantly greater degree than the better readers. Doing what is socially correct and proper should lead to some acceptance for the poor reader in social situations where he might otherwise feel inadequate. The need to be treated with understanding, kindness and consideration did not seem to be outstanding for this group, as might have been expected, for they did not value support significantly more than the better readers.

Peers rated significantly more better readers as leaders. —This was expected and would seem logical since the better reader would be more capable in the classroom and in school related activities and would, therefore, be more likely to occupy a position of leadership. Peers did not, not, however, rate better readers as occupying positions in significantly more positive personal relationships, nor did they rate poorer readers as occupying significantly more positions in negative personal relationships. This rating would be closely related to the sociability factor on the personality measure. Discussion of sociability suggested that the group was sufficiently homogeneous in school and academic histories that friends did not discriminate regarding academic ability.

On the Teacher Rating of social and emotional adjustment the better readers were found to be significantly better adjusted than the poorer readers. This agrees with previous research findings. It is possible that in the classroom situation any social or emotional difficulties related to reading ability and academic functioning would be heightened, thereby making the teacher more aware of the maladjustment than others in association with the students.

Females were found to be significantly more individualistic while males were found to value conformity to a significantly greater degree. This was expected because of the possibility of greater pressure on males to succeed. This allows the female more freedom to be an individual, while the male must be concerned with achievement and performance. Males were also found to be more sensitive, which was expected because of findings that indicate that males receive rejection from teachers for academic failure, while females receive

concern. Females, however, were found to be significantly more apprehensive, which seems to a contradiction, unless apprehension is viewed as concern expressed in a general manner with sensitivity bearing a more specific orientation.

Females were found to value leadership to a significantly greater degree. Perhaps females recognize and respond to authority more readily and therefore appreciate leadership positions to a significantly greater degree.

Males were found to be significantly more spontaneous and sociable. Another contradiction exists here since females were rated by peers as having significantly more positive personal relationships. It may be that males are more sociable, but more wary of rating one another on such characteristics.

Limitations of the Study

1. The sector of the reading ability continuum, upon which this study was based, was quite limited, therefore the accuracy of generalizations drawn from the findings may be likewise limited.
2. The Teacher Rating Scale was completed by five different teachers. It is quite possible that personal biases and philosophies would be reflected in the evaluation of the students.

Conclusion

Social and emotional differences did not exist between the sample group of poor readers and the norm. Significant differences did exist, however, between the poor and better readers, but not to the extent described in the research literature. In fact, most of the differences evident were in school performance related areas. Significant social-emotional differences were also evident in comparisons between males and females, however some of these differences proved to be contradictory.

Generally, the social-emotional health of the poor readers in the sample was better than expected in view of the literature. This may be attributed to the philosophy of reduced stress placed upon academic failure and the addition of success experiences through the vocational training program offered by W.P. Wagner. It may also be due to the fact that the removal of students from the regular setting has reduced opportunities for comparisons between these students and normally achieving students, thus making the deviation from the norm in academic performance less tangible in the minds of the poor students who attend W.P. Wagner.

Since personality growth has been found to relate positively and significantly to academic performance, one warranted assumption about the school's responsibility to an individual is that the school should not lessen a student's perception of self, it should not be detrimental to the growth and development of a healthy personality. In fact, it should enhance the child's perceptions of himself and provide an environment conducive to productive functioning. The program at W.P. Wagner appears to have been successful in maintaining

this function with a group of students who are failures of the regular system, and highly vulnerable to emotional and social maladjustments. This school possesses the vehicle for self-enhancement that is available to every situation involving interpersonal process--positive experiences and success experiences. This does not mean that students should be protected from making mistakes. They need to make mistakes and to realize that it is a normal, acceptable thing. It would be a fatal error to attempt to shield a child from such experiences, which, rightly encountered, are the means of approaching emotional and personal maturity. If a student is able to meet each problem that arises in the school situation with confidence and can face failure with equanimity, he will be better prepared to meet the stresses and strains of later life.

One thing is clear--it is not only the talents of the children which require attention to produce healthy personalities. It is also the values and reactions of society to the variety of talents which the children possess, which must be changed.

The trend in modern education to provide for individual differences among pupils is well illustrated by efforts to afford educational opportunities for exceptional children equal to those available to average pupils. Equality is not achieved, however, by providing identical school programs for all children, but rather by making available, through special teaching procedures and curriculum content, the needed adjustments that will enable any child, with an unusual problem, to work towards his potentialities at his own pace. Teaching,

thus, requires numerous skills, a variety of techniques, and a wide range of understanding to meet the needs of the multi-dimensional individuals that pass through the system.

A word of caution should be offered to the teachers involved in a special program for poor readers. The review of the literature would suggest that the students in such a program would possess and exhibit various forms of emotional instability and personality maladjustment due to failure experiences in previous learning situations and the reactions of others to this failure. The present research points to the fact that any personality difficulties that may have existed among those in the sample population were either slight or were reduced by participation in a program which not only taught skills but also helped the students to re-establish self-respect and self-confidence. Students of such programs should, therefore, not be viewed as stereotypes of maladjustment due to reading failure. Consideration must be given to the treatment those with reading problems have received and to the reactions presented by individuals involved with them.

Suggestions for Further Research

1. In order to better establish the relationship between reading acquisition and emotional development, a preschool test of emotional stability could be compared with the results of a test of emotional stability administered to the same group at the end of the first or second year of school.

2. To establish the effectiveness of a special program geared to reduce the emotional and social maladjustment of students with poor reading, a test of emotional stability administered before entering such a program could be compared with a similar test administered after participation in the program.
3. Comparisons could also be made between the emotional stability of students in a special setting for poor readers and the emotional stability of a control group of students of equal reading ability, who are placed in a regular setting.
4. More precise comparisons of the emotional stability of males and females who have experienced reading problems could be made.
5. To establish the effect of teacher or parent attitude upon poor readers, tests of emotional stability could be administered and compared before and after attempts have been made to counsel the attitude of the parents or teachers involved with such youngsters.

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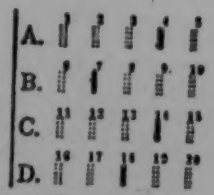
APPENDIX A

The Diagnostic Test of Silent Reading Abilities

TEST 1

Directions: Read the first sample carefully.

A. sky : blue :: grass : 1. grows 2. hay 3. ripe 4. green 5. lawn - - A
B. fish : swims :: man : 6. stands 7. walks 8. talks 9. works 10. sleeps - B
C. head : hat :: foot : 11. ankle 12. leg 13. toe 14. shoe 15. snow - - C
D. foot : toe :: hand : 16. glove 17. arm 18. finger 19. fist 20. man - - D



You see the first two words, sky and blue. They go together in a certain way. Now among the last five words there is one word that goes with grass in the same way that blue goes with sky. It is green, of course. Grass is green just as the sky is blue. None of the other words goes with grass in the same way that blue goes with sky. Green has a 4 in front of it. Find 4 above the row of dots after A. You see a mark has been made between the rows of dots under 4.

Now look at Sample B. A man stands, walks, talks, works, and sleeps. But which of these words goes with man in the same way that swim goes with fish? Walks is correct. Walks has a 7 in front of it. So a line has been drawn between the rows of dots under 7 after B.

Look at Samples C and D. Listen to the directions. Do you understand why the marks have been drawn between the rows of dots under 14 and 18?

Turn to the side of the answer sheet with a star and Part II in the upper left corner. Begin with number 1 below and do each exercise in the same way.

A.

1 screw: screwdriver:: nail: 1. iron 2. head 3. hammer 4. wood 5. drive
2. fire: hot:: ice: 6. freezes 7. melts 8. cools 9. cold 10. water
3. cat: scratch:: bee: 11. honey 12. hive 13. buzz 14. sting 15. fly
4. dog: barks:: bird: 16. flies 17. sings 18. wings 19. eats 20. lays
5. lettuce: garden:: apple: 21. tree 22. orchard 23. pick 24. sweet 25. blossom
6. cold: ice:: heat: 26. cook 27. steam 28. summer 29. lightning 30. fire
7. pencil: point:: knife: 31. handle 32. dull 33. blade 34. sharp 35. cut
8. wolf: dog:: tiger: 36. hunter 37. bear 38. puma 39. elephant 40. cat
9. ounce: pound:: inch: 41. measure 42. yard 43. length 44. foot 45. meter
10. present: known:: future: 46. ahead 47. bright 48. past 49. foretold 50. unknown
11. birds: wings:: fish: 51. scales 52. fins 53. swim 54. gills 55. catch
12. color: bright:: sound: 56. noise 57. grating 58. loud 59. tone 60. harsh
13. stone: marble:: wood: 61. furniture 62. carpenter 63. tree 64. oak 65. forest
14. light: sound:: darkness: 66. dawn 67. fear 68. gloom 69. calm 70. silence
15. fork: tine:: knife: 71. cut 72. handle 73. sharp 74. blade 75. steel
16. proverty: wealth:: sickness: 76. medicine 77. doctor 78. cure 79. death 80. health
17. cowardice: contempt:: dignity: 81. respect 82. wealth 83. honor 84. position 85. pride
18. water: quantity:: steam: 86. pressure 87. vapor 88. gas 89. heat 90. amount
19. automobile: concrete:: train: 91. engine 92. cars 93. rails 94. steel 95. engineer

TEST 2

Directions: Read these two sentences carefully.

A. He felt very sad. 1. timid 2. happy 3. weary 4. sorrowful 5. hungry - A

B. Will you watch over my books? 6. deliver 7. guard 8. purchase 9. call for 10. return - - -

TEST 3

Directions: Look at the first line of words carefully.

A. simple - - 1. hard 2. funny 3. easy 4. busy 5. tiny - - - - - A

B. guard - - 6. stop 7. watch over 8. hit 9. run away 10. climb - - B

You see there are five words after the word simple. One of them means the same as simple. It is easy, of course. Look at the number in front of easy. The number is 3. Find 3 above the row of dots after A. A mark has been made between the rows of dots under 3.

Now look at the second line of words. Which word or phrase means the same as guard? Yes, watch over. Watch over has 7 in front of it. Find 7 above the row of dots. A mark has been made between the rows of dots under 7.

Begin with number 1 below and do each exercise in the same way.

C

1. agony — 1. great joy 2. greediness 3. hunger 4. gloom 5. great pain
2. unprofitable — 6. seasonable 7. sacred 8. useless 9. terrible 10. gainful
3. achieve — 11. accomplish 12. begin 13. assist 14. plan 15. take up
4. cordial — 16. cold 17. hearty 18. cleve 19. careless 20. powerful
5. brink — 21. edge 22. top 23. slope 24. surface 25. cliff
6. resistance — 26. change 27. cruelty 28. respect 29. opposition 30. fondness
7. security — 31. profit 32. income 33. safety 34. debt 35. risk
8. sullen — 36. fearful 37. sulky 38. sly 39. timid 40. kind
9. recount — 41. excite 42. tempt 43. prevent 44. experience 45. tell
10. exhaust — 46. destroy 47. tear apart 48. throw away 49. use up 50. select
11. fugitive — 51. captive 52. fighter 53. soldier 54. enemy 55. runaway
12. substantial — 56. helpless 57. proper 58. solid 59. hopeful 60. suitable
13. loathe — 61. soothe 62. resemble 63. neglect 64. hate 65. love
14. indignation — 66. courage 67. desire 68. display 69. punishment 70. displeasure
15. opportune — 71. very early 72. previous 73. probable 74. secure 75. seasonable
16. vehemence — 76. strength 77. envy 78. fury 79. hope 80. joy
17. obscure — 81. not costly 82. not plain 83. not large 84. valuable 85. not regular
18. dissemble — 86. proclaim 87. recount 88. disguise 89. announce 90. predict
19. eminent — 91. courteous 92. industrious 93. common 94. prominent 95. familiar

TEST 4

Directions: Read these two sentences carefully.

A. The sun rises in the 1. evening 2. west 3. south 4. morning 5. north A

B. A chauffeur drives an 6. engine 7. automobile 8. airplane 9. horse 10. boat B

You see that there are five possible answers in each sentence. Only one answer is right. In the first sentence the right answer is morning. Morning has a 4 in front of it. Find 4 above the row of dots after A. You see a mark has been made between the rows of dots under 4.

Now look at the second sentence. Which word is the right one to finish the sentence correctly? Yes, automobile, and automobile has a 7 in front of it. Find 7 above the row of dots. A mark has been made between the rows of dots under 7.

Begin with number 1 below and do each exercise in the same way.

D

1. Limes are a kind of 1. nut 2. vegetable 3. tree 4. fish 5. fruit----------
2. A teller works in a 6. bank 7. store 8. office 9. factory 10. hospital----------
3. Pineapples come from 11. Florida 12. Hawaii 13. Cuba 14. Brazil 15. China----------
4. Whist is played with 16. cards 17. dice 18. rackets 19. mallets 20. bats----------
5. A representative of a foreign government is a 21. deputy 22. proxy 23. ambassador 24. alternate 25. delegate----------
6. Cobra is a kind of 26. insect 27. fish 28. bird 29. mammal 30. snake----------
7. Decisions in a football game are made by the 31. coach 32. umpire 33. halfback 34. announcer 35. manager----------
8. Lloyd George had most influence in 36. France 37. Russia 38. Germany 39. Greece 40. England----------
9. Tokio is in 41. China 42. Philippines 43. India 44. Japan 45. Manchuria----------
10. Macbeth was written by 46. Shakespeare 47. Milton 48. Defoe 49. Stevenson 50. Scott-
11. A felony is a 51. tax 52. permit 53. crime 54. legal summons 55. penalty----------
12. A franchise is a 56. tax 57. crime 58. legal summons 59. penalty 60. privilege---
13. Isaiah was a 61. king 62. prophet 63. apostle 64. law-giver 65. patriarch---------
14. Vodka is a kind of 66. drink 67. wood 68. food 69. coal 70. cloth----------
15. Forum refers to 71. newspapers 72. news weekly 73. encyclopedia 74. humorous weekly 75. monthly magazine----------
16. Wagner was a 76. sculptor 77. musician 78. painter 79. scientist 80. author------
17. Socially minded people are organized into 81. clubs 82. parties 83. denominations 84. labor unions 85. associations----------
18. Laissez faire applies to 86. religion 87. philosophy 88. music 89. architecture 90. government----------
19. Confucianism is one of the chief religions of 91. Turkey 92. Japan 93. India 94. China 95. Russia ----------

TEST 5

DIRECTIONS TO THE STUDENT

Read the paragraph below carefully.

Paragraph

It was Perez, a friar, on whom Columbus called with his little son Diego, and explained his need for men and ships to prove the world is round. The friar interested his friend, Queen Isabella of Spain, in the plans of Columbus. But when the three ships that carried Columbus to America sailed from Spain, Diego was left to stay at the palace of the Queen until his father should come back.

Questions

A. The paragraph is mainly about
1. Perez, the friar 2. Queen Isabella 3. the ships in which Columbus sailed 4. the voyage of Columbus 5. the palace of the Queen . . . . . A

B. Perez had been a friend of
6. Columbus 7. Diego 8. Queen Isabella 9. Diego's father 10. the father of Columbus . . . . . B

C. Diego was left at home because he was
11. a friar 12. too young 13. not interested 14. afraid to go 15. didn't know his father was going C

D. When Diego was left at the palace, he was
16. happy 17. glad 18. relieved 19. joyous 20. unhappy . . . . . D

Answers

	1	2	3	4	5
A					
	6	7	8	9	10
B					
	11	12	13	14	15
C					
	16	17	18	19	20
D					

Read the first statement at the side of the paragraph, the one with A in front of it. Since the paragraph is mainly about the plans and efforts of Columbus and his sailing, the statement "The paragraph is mainly about . . . " is best completed by 4. the voyage of Columbus. So a mark has been made between the rows of dots under 4 after A in the answer column.

Now read the statement with B in front of it: "Perez had been a friend of . . . " Since the paragraph says that the friar interested his friend, Queen Isabella of Spain, in the plans of Columbus, Queen Isabella best completes the statement. Queen Isabella has 8 in front of it. So after B in the answer column, a mark has been made between the rows of dots under 8.

The best answer to complete the third statement is too young. In front of it is 12, so in Line C in the answer column a mark has been made between the rows of dots under 12.

Unhappy best completes the statement with D in front of it. Unhappy has 20 in front of it. So in Line D in the answer column a mark has been made between the rows of dots under 20.

When you turn to Page 7 of the test booklet, find the side of the answer sheet with a circle and Part III in the upper left corner. Read the first paragraph and then read the first question at the right of it. Choose the best answer just as has been done above. Look at the number in front of this best answer and find it above the rows of dots after the 1 on the answer sheet. Make a mark between the rows of dots that are under the number that is in front of the answer you chose for the first question. Do the other paragraphs and questions on Page 7 in the same way.

When you have finished Page 7, continue on Page 8. Choose the right answers and then on the answer sheet put marks under the numbers of right answers. After Page 8, continue on the other pages in the same manner until you have finished the test on Page 16.

1. When Brandt, because of rash acts, found himself in danger of being seized by the British, he sought shelter at the farmhouse of a relative, although he knew that the family would suffer punishment if the British heard that he had been there. Early in the next afternoon, Bob, the youngest son of the household, burst in with the news that a band of British soldiers were on the way to search the farm for Brandt. "There is a boat on the riverbank," suggested Ben, the elder son. As Brandt dashed out of the house he nearly ran into Hetty, a girl of twelve, who was sprinkling some cloth to bleach it in the sun. "Tell the soldiers I have gone up the road while I get away in the boat," he paused to say.

"I can't do that, cousin, it would not be true."

"But you would not betray me to the British, Hetty?"

"Run! I shall not tell them which way."

Just then the band of British were heard approaching.

"Quick! Lie down while I cover you."

When the captain of the band rode up where Hetty was sprinkling her cloth and inquired if she had seen a man running by, she replied. "Yes, sir, but I promised not to tell which way."

"But you must or it will be the worse for you."

"He said he was going for the boat but asked me to tell you that he had gone up the hill."

1. The story is mainly about

1. Brandt's escape from the farm 2. British pursuit of Brandt 3. Hetty's danger 4. Hetty's truthfulness 5. how Hetty saved Brandt from capture

2. How did Hetty act when Brandt asked her to lie to the soldiers?

6. as if afraid 7. judiciously 8. cowardly 9. traitorously 10. resentfully

3. How did Brandt probably feel at Hetty's reply that she could not lie?

11. sorrowful 12. chagrined 13. respectful 14. resentful 15. thankful

4. In coming to the Atwood home for protection, Brandt was

16. inconsiderate 17. despicable 18. courageous 19. honoring them 20. self-sacrificing

2. The one fact which restricts the mode of life and nutrition of the fungi is the absence of chlorophyll and their consequent dependence on outside supplies of organic carbon and in many cases of organic nitrogen. Fungi are, therefore, compelled to live on materials derived from other plants or from animals, and are either parasites on living organisms or saprophytes living on their dead. The large majority are the latter and they, with the bacteria, are the great agents of decay in nature, the moulds attacking the fallen leaves and branches and the bodies of dead animals as well as stale foods and damp clothing. The fungi afford some of the best instances of symbiosis or the living together of dissimilar organisms like the lichens and algae, in which an alga receives from the fungus water and inorganic substances and sometimes protection from desiccation, while the fungus derives its organic food supply from the algae. Another form of association between fungi and higher plants, known as mycorhizas, consists of the fungi growing in intimate relation with or within the cells of the roots of higher plants. In the case of the orchids which are devoid of chlorophyll and must therefore depend for their whole supply of organic food on the humus in which they live, there is no evidence that the plants are able to undertake this absorption in the absence of the fungus.

5. The paragraph is mainly about the

21. things fungi attack 22. harm fungi do 23. way fungi live 24. different kinds of fungi 25. what foods fungi need

6. Fungi are

26. necessary for the growth of some plants lacking chlorophyll 27. always harmless 28. necessary for the growth of all plants 29. always beneficial 30. harmful to the algae

7. One of the causes of things rotting is

31. lack of chlorophyll 32. organic carbon 33. bacteria 34. symbiosis 35. mycorhizas

8. The process by which fungi help the roots of higher plants to function is called

36. parasites 37. symbiosis 38. saprophytes 39. decay 40. mycorhizas

9. Moulds that live on stale foods are

41. algae 42. saprophytes 43. parasites 44. lichens 45. bacteria

10. Fungi are

46. animals too small to be seen 47. plants too small to be seen 48. mainly parasites 49. a kind of plant 50. a kind of animal

11. From algae, lichens obtain

51. chlorophyll 52. organic carbon 53. oxygen 54. water 55. carbon dioxide

12. The dependence of fungi upon other organisms for their food supply is due to their

56. being plants 57. tiny size 58. being agents of decay 59. lack of inorganic substances 60. lack of chlorophyll

3. Gerry always wanted to join Bob and Roy when they went off to fish. She wanted to be twelve and a boy instead of a girl and nine. When she begged to go along this morning they laughed and said, "No girls allowed," as usual.

When they promised her a perch for supper, she replied, "I don't want your old fish."

As she lay in the hammock, she heard someone coming up the walk. "Molly," she thought; "now I shall have to play with her the rest of the day."

But it turned out to be Cousin Ned in his navy clothes. He was full of stories about how his boat had crossed the ocean many times among the submarines, but he could stay only a couple of hours and the boys would not be home until night. A swift thought ran through her mind, but she was ashamed of it and wished there was some way to get hold of them. They were across the bay with the boat. She knew their code of signals but they were too far away to hear her. Running to the roof, she tried signalling to them with a mirror to come home. At first they hesitated, but finally gave up their sport to come.

13. The paragraph is mainly about

1. a fishing trip 2. a sailor's arrival 3. Gerry's trials 4. signaling the boys 5. Molly's visit -

14. The "swift thought" that ran through Gerry's mind was

6. serves them right 7. they will be disappointed 8. I wish the boys were here 9. I must get them 10. I wish I were with them - - - - - - - -

15. Gerry's feeling for Molly was one of

11. hating 12. being angry 13. envy 14. being bored 15. liking - - - - - - - - - - - -

14. Balance, measure, and patience, these are the eternal conditions of high success, and these are just what the sentimental Celt has never had. Even in the world of spiritual creation, he has never, in spite of his admirable gifts of quick perception and warm emotion, succeeded perfectly because he never has had steadiness, patience, sanity enough to comply with the conditions under which alone can expression be perfectly given to the finest perceptions and emotions. The Greek has the same perceptive, emotional temperament as the Celt; but to this temperament he adds the sense of measure; hence his admirable success in the plastic arts, in which the Celtic genius with its chafing against the despotism of fact, its perpetual straining after mere emotion, has accomplished nothing. In the comparatively petty art of ornamentation, in rings, brooches, relic-cases, he has done just enough to show his delicacy of taste, his happy temperament; but the grand difficulties of painting and sculpture, the prolonged dealings of spirit and matter, he has never had patience for. Take the more spiritual arts of music and poetry. All that emotion alone can do in music the Celt has done; the very soul of emotion breathes in the Scotch and Irish airs: but what has the Celt, so eager for emotion that he has not had patience for science, accomplished in music in comparison with the less emotional but science developing German? In poetry, where emotion counts for so much, but where reason, measure, sanity also count for so much, the Celt has shown genius but his faults have hindered him from producing great works such as other great nations with a genius for poetry — the Greeks or Italians — have produced. If his rebellion against fact has lamed the Celt in spiritual work, how much more it has lamed him in business and politics!

16. The paragraph is mainly about the

11. Celtic temperament 12. arts of painting, music, and poetry 13. shortcomings of the Celt 14. Celtic emotions 15. conditions of high success - - -

17. The Celt has accomplished least in

16. music 17. art of ornamentation 18. poetry 19. sculpture 20. politics - - - - - - - -

18. Perfect expression can be given to the finest perceptions only when there is

21. a happy temperament 22. sanity 23. reason 24. rebellion against facts 25. love of poetry -

19. The German surpasses the Celt in

26. emotional feeling 27. happiness temperament 28. quick perception 29. dealing with facts 30. delicacy of taste - - - - - - - - - - - - - -

20. One of the shortcomings of the Celt is his

31. warmth of emotions 32. want of patience 33. happiness of temperament 34. quickness of perception 35. delicacy of taste - - - - - - - -

21. High success calls for

36. warm emotion 37. delicacy of taste 38. rebellion against facts 39. straining after emotion 40. balance - - - - - - - - - - - - - -

22. Among the Celts are the

41. Greeks 42. Germans 43. Scotch 44. Italians 45. Romans - - - - - - - - - - - - - -

5. In a typical flower, there are four distinct whorls, an outer calyx of sepals, usually green in color and protective in function; within it is the corolla of petals, commonly highly colored to attract insects; next the androecium of stamens, arising from receptacles within the petals and consisting each of a stalk, the filament, on which is an anther containing the pollen sacs from which the pollen is ultimately discharged, and in the center the pistil or gynoecium of carpels which is made up of stigma, style and ovary, and after flowering, is enlarged to form the fruit and contain the seeds. The parts of the calyx are sometimes free or separate, at other times united; in the former case, the calyx is polysepalous, in the latter gamosepalous. A corolla is dipetalous, tripetalous, etc., according as it has two, three, etc., separate parts; the general name polypetalous is given to corollas with separate parts, while those in which the parts are united are monopetalous, gamopetalous or sympetalous. The filaments may cohere to a greater or lesser extent, the anthers remaining free. Thus, all the filaments may unite to form a tube around the pistil, in which case the term monodelphous is used, or they may be arranged in two bundles (diadelphous) as in the pea. When a gynoecium consists of a single carpel it is simple or monocarpellary, when composed of several carpels, each of which has its own ovary, style, and stigma, it is compound or polycarpellary.

23. The paragraph is mainly about
1. structure of flowers 2. variations in flowers 3. functions of different parts of a flower 4. interrelationship of different parts of a flower 5. evolution of flowers - - - - - - - - - - - - - - - - - -

24. The pistil contains
6. petals 7. sepals 8. stigmas 9. anthers 10. filaments - - - - - - - - - - - - - - - - - -

25. When the petals of a flower are separate, the corolla is
11. polypetalous 12. diapetalous 13. monopetalous 14. sympetalous 15. gamopetalous - - - - -

26. The parts of a flower that grow out of the petals are the
16. sepals 17. carpels 18. stigmas 19. stamens 20. anthers - - - - - - - - - - - - - - - - -

27. The development and distribution of the pollen is a function of
21. corolla 22. stamens 23. styles 24. calyx 25. ovaries - - - - - - - - - - - - - - - - -

28. The stamens are usually
26. green 27. parts of the corolla 28. highly colored 29. protective in function 30. bearers of the pollen sacs - - - - - - - - - - - - - - - - -

6. We always find the warmest air at the top of a room. When the air is heated, it expands, becomes lighter in weight, and is then pushed up by the heavier cold air. All around the Equator, the air heated by the more direct rays of the sun is pushed up by the cooler air flowing in from both the north and the south. The great streams of cool air blowing toward the Equator are called the trade winds. As the earth turns from west toward the east, the winds lag behind the solid earth. Hence, they come from the northeast in the northern hemisphere and from the southeast in the southern hemisphere. The warm air pushed up at the Equator flows toward the North and South Poles and is called the anti-trade winds. Because the earth turns faster at the Equator than at the Poles, the anti-trade winds in the northern hemisphere blow from the southwest while those in the southern hemisphere blow from the northwest. The air in free circulation always contains water vapor. Warm air can hold more than colder air. When the warm air is cooled, the water vapor condenses as rain. The warm air pushed up in the equatorial region holds much water vapor, which is cooled as it is pushed upward and flows toward the poles.

29. The paragraph is mainly about
16. temperature 17. direction of winds 18. expansion of the air 19. the Equator 20. rainfall -

30. In the northern hemisphere, the cold winds blow from the
21. southwest 22. southeast 23. west 24. northeast 25. northwest - - - - - - - - - - - - - -

31. In the southern hemisphere, the cold winds blow from the
26. southwest 27. southeast 28. north 29. northwest 30. northeast - - - - - - - - - - - -

32. In the southern hemisphere, the warm winds blow from the
31. southwest 32. southeast 33. south 34. northwest 35. northeast - - - - - - - - - - - -

33. Which of these winds blows over the British Isles with its damp climate and location north of the Equator?
36. southwest wind 37. northwest wind 38. trade wind 39. northeast wind 40. southeast wind -

7. The people of Athens and Sparta spoke a common language, Greek. Athens, rising high from the plain and exposed to the fresh breezes from the sea, was a fast growing city of busy trade, but not so busy but that the freemen loved to sit in the sun and discuss poetry or listen to the wise words of a philosopher without a thought of war. Sparta, built at the bottom of a deep valley, used the surrounding mountains as a barrier to foreign thought. It was an armed camp, where the people knew how to fight and liked to fight, but they never wrote a line that was considered literature. When Athens, attacked by the Persians in superior numbers, asked aid of Sparta, too small an army was dispatched to keep Athens from being sacked by the Persians, but when the Persians with their larger numbers threatened to overrun all Greece, the Spartans led the victorious land attack on the Persians while the Athenian ships destroyed the enemy's fleet. Famous sculptors, painters, and scientists were sought far and wide to help rebuild the city of Athens and make it more beautiful but at the same time high walls were built to make it the strongest fortress of that day, stronger by far than Sparta, despite the fact that the Persians had been completely broken.

34. The paragraph is mainly about the
21. Persian attack upon Athens 22. union of Sparta and Athens 23. rebuilding of Athens 24. destruction of the Persian attackers 25. the contrast between Athens and Sparta - - - - - - -

35. Athens and Sparta had similar
26. speech 27. ideals 28. interests 29. ideas 30. attitudes - - - - - - - - - - - -

36. The Spartans evidently looked upon the growth of Athens with
31. suspicion 32. admiration 33. envy 34. pride 35. fear - - - - - - - - - - - - - -

37. The thing which the Spartans and Athenians had in common was
36. trained army 37. foreign trade 38. literary products 39. language 40. interest in art - -

38. After the defeat of the Persians, the feeling that grew up between the Athenians and Spartans was one of
41. cooperation 42. hostility 43. trustfulness 44. helpfulness 45. sympathy - - - - - - -

39. Before the Persian War, Sparta and Athens were evidently
46. bitter enemies 47. very friendly 48. united politically 49. keen rivals 50. very cooperative

8. Never shall I forget the morning when my father changed his last measure of grain for a shawl of scarlet cloth fringed with silver, which he threw around my shoulders. After he had decked my head with flowers, he led me into the market place where a concourse of people were waiting for the purchase of slaves. Proud was I when several talents were offered for me. When my father scowled and refused the money, I thought he must be playing a game and laughed. Even when an elderly man asked me with solicitude if I was hungry I laughed again for my father had nourished me most carefully and plentifully. But Xanthus, waiting for no answer, took out of a sack, which one of his slaves carried at his side, a cake of wheaten bread, and a piece of honey-comb and gave them to me. The honey-comb I held to my father's mouth. He dashed it to the ground; but, seizing the bread, began to devour it ferociously. This, too, I thought was play and began to laugh, but Xanthus looked at him like one afraid, and smote the cake from him, crying aloud, "Name the price." My father placed me in his arms, naming a price much below what the other had offered. But while Xanthus was counting out the silver, my father seized the cake again, for his hunger was exasperated by the taste and the delay. Suddenly there was a tumult. Turning around in the old woman's bosom who had received me from Xanthus, I saw my beloved father struggling on the ground, livid and speechless. The more violent my cries the more rapidly they hurried me away; and many were soon between us.

40. The paragraph is mainly about a
1. slave market 2. father's sacrifice 3. girl sold into slavery 4. wicked father 5. man being trampled upon - - - - - - - - - - - - -

41. The father sold his daughter so that
6. he might have money 7. he would not have to take care of her 8. he could do as he wanted to 9. he would be avenged 10. she would not starve

42. When the father sold his daughter, it was a time of
11. celebration 12. debauchery 13. famine 14. rejoicing 15. war - - - - - - - - - -

43. The father sold his daughter to Xanthus rather than the first bidder because
16. he trusted Xanthus 17. Xanthus offered more money 18. Xanthus was older 19. Xanthus had slaves 20. he feared the first bidder might not pay

44. The father's attitude toward his daughter was one of
21. cold-bloodedness 22. cruelty 23. devotion 24. fear 25. hatred - - - - - - - - - -

45. The father's action in selling his daughter to Xanthus was one of
26. mercy 27. selfishness 28. cowardliness 29. cruelty 30. rapacity - - - - - - - - -

46. Xanthus was a man of great
31. wealth 32. power 33. ambition 34. understanding 35. rudeness - - - - - - - - -

9. Just as at any earlier date, the scientist looked first upon the molecule and then upon the atom as the ultimate element of matter, so today he envisages all the stuff of the universe in terms of electrons and protons, the negative and positive electricities which were earlier assumed to explain all electrical phenomena. So now we say that matter is granular in structure and electrical in nature. The constant change and motion of matter which appear as chemical, electrical, or gravitational phenomena are ascribed to energy, the existence of which is an inference from the motions involved in the changes that occur in the form, chemical composition, or location of bodies of matter. Only in this kinetic form can it be measured or detected, for between such occasions it masks its potentialities and appears as harmless as the explosive shell, the high tension wires, or the reservoir of still water in the hills above the hydroelectric plant. To fill the broad spaces in which our tangible and ponderable matter forms mere specks, a vast ether is assumed through which energy may be transmitted from one body to another, whether as light or heat from solar bodies, or as so-called ether waves from a radio broadcasting station to a receiving set. Of the three entities of matter, energy, and ether — ether is the most debatable assumption, for energy may not be transmitted through a continuous ethereal medium but hurtled through space like a bullet, for which there is much evidence. In a science where the ether is a convenient postulate and energy a formless unknown, the electron stands out in stark reality as a definite ponderable particle, the tiny material and ultimate element of the universe.

47. The paragraph is mainly about

1. nature of energy 2. nature of matter, energy, and ether 3. ultimate element of matter 4. electrical and gravitational phenomena 5. kinetic form of energy - - - - - - - - - - - - - - -

48. Heat from the sun is thought of as

6. gravitational phenomena 7. ether waves 8. motion of bodies 9. transmission of energy 10. chemical phenomena - - - - - - - - - -

49. Tangible matter is thought by scientists to consist of

11. electrons and protons 12. the ether in space 13. gravitational phenomena 14. energy in its kinetic form 15. ether waves - - - - - - -

50. The smallest known particles of which things are composed are

16. kinetic forms of energy 17. molecules 18. atoms 19. chemical phenomena 20. electrons - - - -

51. The existence of which of these is an assumption only?

21. electrons 22. gravitational phenomena 23. ether 24. energy 25. atoms - - - - - - - - - -

52. The existence of energy is inferred from

26. changes in the location of matter 27. the chemical composition of matter 28. reservoirs of water 29. granular structure of matter 30. ether waves

APPENDIX B

Sociometric Measure

Name TWO students from within THIS classroom to answer each of the following questions:

1. What two people would you chose to be your close friends?

   1)

   2)

2. What two people would you chose to work with on class projects?

   1)

   2)

3. What two people would you vote for to be class leader?

   1)

   2)

4. If you could have two people removed from this class, who would they be?

   1)

   2)

5. Who do you think would best be able to explain the goals of W.P. Wagner?

   1)

   2)

6. Who would you not want to work with on class projects?

   1)

   2)

7. What two people would you chose to live with, as roommates?

   1)

   2)

APPENDIX C

KEY TO LETTER RATINGS

A—Among the highest 10% of all children OF HIS AGE in that item.
B—Among the next highest 20%, i.e. within the highest 70 to 90% of all children OF HIS AGE in that item.
C—Among the middle 40% of all children OF HIS AGE in that item.
D—Among the next lowest 20%, i.e. within the lowest 10 to 30%, of all children OF HIS AGE in that item.
E—Among the lowest 10% of all children OF HIS AGE in that item.

(CIRCLE ONE)

1. OVERALL EMOTIONAL ADJUSTMENT ..... A B C D E 1.
(Definition: *Total emotional adequacy in meeting the daily problems of living as manifested in school.*)
A. Very well adjusted
B. Well adjusted
C. Moderately adequate adjustment
D. Poorly adjusted
E. Very poorly adjusted

3. TENDENCY TOWARDS DEPRESSION ..... A B C D E 3.
(Definition: *Tendency towards melancholia, depressed mood reaction.*)
A. Generally very happy
B. Moderately happy
C. Occasionally unhappy
D. Tendency towards depression
E. Generally depressed

5. EXTROVERSION - INTROVERSION ..... A B C D E 5.
(Definition: *Tendency towards living outwardly and expressing his emotions spontaneously vs. tendency towards living inwardly and keeping emotions to himself.*)
A. Extremely extroverted
B. Characteristically extroverted
C. About equally extroverted and introverted
D. Moderately introverted
E. Extremely introverted

7. MOTOR CONTROL AND STABILITY ..... A B C D E 7.
(Definition: *Capacity for effective coordination and control of motor activity of the entire body.*)
A. Extremely good motor control and stability
B. Moderately good motor control and stability
C. Fair motor control and stability
D. Moderately poor motor control and stability—restless, hyperkinetic
E. Extremely poor motor control—markedly restless, hyperkinetic

9. EMOTIONAL IRRITABILITY ..... A B C D E 9.
(Definition: *Tendency to become angry, irritated or upset.*)
A. Unusually good natured
B. Good natured—rarely "irritable"
C. Fairly good natured—occasionally "irritable"
D. Moderately "irritable"—frequently shows moderate "irritation"
E. Extremely "irritable"—frequently shows marked "irritability"

KEY TO LETTER RATINGS

A—Among the highest 10% of all children OF HIS AGE in that item.

B—Among the next highest 20%, i.e. within the highest 70 to 90% of all children OF HIS AGE in that item.

C—Among the middle 40% of all children OF HIS AGE in that item.

D—Among the next lowest 20%, i.e. within the lowest 10 to 30%, of all children OF HIS AGE in that item.

E—Among the lowest 10% of all children OF HIS AGE in that item.

(CIRCLE ONE)

2. SOCIAL MATURITY ..... A B C D E 2.

(Definition: *Ability to deal with social responsibilities in school, in the community, and at home, appropriate to his age.*)

A. Very superior social maturity
B. Slightly superior social maturity
C. Average social maturity
D. Slightly inferior social maturity
E. Very inferior social maturity

4. TENDENCY TOWARDS AGGRESSIVE BEHAVIOR ..... A B C D E 4.

(Definition: *Overt evidence of hostility and/or aggression towards other children and/or adults.*)

A. Rarely aggressive
B. Occasionally aggressive
C. Fairly aggressive
D. Frequently aggressive
E. Extremely aggressive

6. EMOTIONAL SECURITY ..... A B C D E 6.

(Definition: *Feeling of being accepted by and friendly towards one's environment.*

A. Extremely secure
B. Moderately secure
C. Only fairly secure
D. Moderately insecure and apprehensive
E. Extremely insecure and apprehensive

8. IMPULSIVENESS ..... A B C D E 8.

(Definition: *Tendency towards sudden or marked changes of mood.*)

A. Extremely stable in mood
B. Stable in mood
C. Usually stable—only infrequent and minor mood changes
D. Unstable in mood—shows marked mood changes on occasion
E. Extreme changes in mood—shows marked or sudden mood changes frequently

10. SCHOOL ACHIEVEMENT ..... A B C D E 10.

(Definition: *Over-all evaluation of pupil's competency in school subjects, relatives to his own age group.*)

A. Very superior
B. Slightly superior
C. Average
D. Slightly inferior
E. Inferior

11. SCHOOL CONDUCT ..... A B C D E 11.

(Definition: *Conduct in the classroom situation as evidence of his ability to accept the rules and regulations of the school community.*)

A. Exceptionally good conduct
B. Superior conduct
C. Average conduct
D. Somewhat inadequate conduct—troublesome disciplinary problem
E. Very inadequate conduct—very serious disciplinary problem